

THE
GARDEN
OF
EDEN:
OR,

An accurate Description of all
Flowers and Fruits now growing
in *England*, with particular Rules
how to advance their Nature and
Growth, as well in *Seeds* and
Herbs, as the secret Ordering of
Trees and Plants.

In Two Parts.

By that Learned and great Obser-
ver, Sir *HUGH PLAT* Kt.

The Sixth Edition.

✓ LONDON,
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at the Crown in *Fleetstreet*, betwixt
the two Temple Gates 1675.

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EDEN

An accurate Description of all
the most interesting and beautiful
spots in England, with a full and
complete list of the most interesting
spots as well in Scotland and
Ireland as in the West of England
York and Wales.

By J. H. COLEMAN
Author of "The History of the
County of Devon" &c.
London: J. H. COLEMAN
1917

TO THE
HONOURABLE
and most perfect
Gentleman,

FRANCIS FINCH *junior*,
of the Inner Temple
Esquire.

SIR,



*YOU may please to pardon
my forward inscribing
this Book to your Name.
Were it a Work of mine
own Composition, I should
have thought on a meaner Patron. But
the memory of that Learned Knight the
Author (to whom I had so near alliance)
may excuse this presumption. He was a
great searcher after all sorts of Know-
ledge,*

ledge, and as great a lover of it in all others. And I humbly conceiv'd I could not do him a higher Service than by placing his Book under your Protection, who are not more honour'd by those many Noble Families whence you are descended, than by that large Portion of Learning and Vertue which have so enriched your Noble mind; and rendred you precious to all that know you. I hope that Candor and Sweetness which accompanies all your Actions, will also shew it self in acceptation of this Offering from him who is ambitious of no other Title than

SIR,

The most humble and most devoted of all those that honour you.

CHARLES BELLINGHAM.

THE
PUBLISHER
TO THE
READER.



Shall not blush to tell you, I had some ambition to Publish this Book, as well to do right to the Learned *Author* (my ever honoured *Kinsman*) as to check their forwardness who were ready to violate so useful a Work. There are some men (of great name in the World)

The Publisher

who made use of this *Author*, and it had been civil to have mentioned his name who held forth a candle to light them to their desires; but this is an unthankful age. And whatever you may think of this small Piece, it cost the *Author* many years search, and no small expence, there being not extant (in our Language) any Work of this Subject so necessary and so brief. He had consultation with all Gentlemen, Scholars, nay not a Gardiner in *England* (of any note) but made use of his Discoveries, and confirmed his *Inventions* by their own *Experience*. And whatever they discovered (such was his modesty) he freely acknowledges by naming the Authors, sometimes in Words at length, as Mr. *Hill*, Mr. *Taverner*, Mr. *Pointer*, Mr. *Colborn*, Mr. *Melinus*, Mr. *Simson*, and sometimes
by

To the Reader.

by T. T. A. P. &c. Whatever is his own hath no name at all, unless sometimes (and that not often) he add *H. P.* at the end of the Paragraph. And when he refers you to some other part of the Book, 'tis according to the *Number* or *Section*, not the *Page*, for that only serves for the *Table*. He wrote other Pieces of *Natural Philosophy*, whereunto he subjoyned an excellent Abstract of *Cornelius Agrippa de Occulta Philosophia*; but they fell into ill hands, and worse times. As for this Collection of *Flowers* and *Fruits*, I would say (if I had not so near Relation to it) that no *Englishman* that hath a Garden or Orchard can handsomely be without it, but at least by having it, will find a large benefit. And all Ladies and Gentlemen by reading these few leaves may not only advance their know-

The Publisher to the Reader.

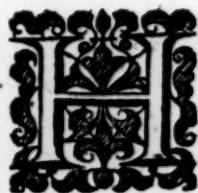
ledge and observation when they walk
into a Garden, but discourse more
skilfully of any *Flower Plant* or *Fruit*
than the Gardiner himself, who (in
a manner) grows there night and day.
Farewel.

C. B.

The

The Author's
EPISTLE
T O A L L

Gentlemen, Ladies,
And all others delighting
in Gods Vegetable
Creatures.



*Having out of mine own
experience, as also by
long conference with di-
vers Gentlemen of the
best skill and practice,
in the altering, multiplying, enlarging,
planting, and transplanting of sundry
sorts of Fruits and Flowers, at length
obtained a pretty Volume of experimen-
tal*

The Authors Epistle

tal observations in this kind: And not knowing the length of my days, nay, assuredly knowing that they are drawing to their period, I am willing to unfold my Napkin, and deliver my poor Talent abroad, to the profit of some, who by their Manual Works, may gain a greater imployment than heretofore in their usual callings: and to the pleasuring of others, who delight to see a rarity spring out of their own Labors, and provoke Nature to play, and shew some of her pleasing Varieties, when she hath met with a stirring Workman.

I hope, so as I bring substantial and approved matter with me, though I leave method at this time to Schoolmen, who have already written many large and methodical Volumes of this Subject (whose Labors have greatly furnished our Studies and Libraries, but little or nothing altered or graced

our

To the Reader.

our Gardens and Orchards) that you will accept my Skill, in such a Habit and Form as I shall think most fit and appropriate for it ; and give me leave rather to write briefly and confusedly, with those that seek out the Practical and Operative part of Nature, whereunto but a few in many Ages have attained, then formally and largely to imitate her Theorists, of whom each age affordeth great store and plenty.

And though amongst these two hundred Experiments, there happen a few to fail under the Workmans hand (which yet may be the Operators mistake, not mine) yet seeing they are such as carry both good sense and probability with them, I hope in your courtesie I shall find you willing to excuse so small a number, because I doubt not, but to give good satisfaction in the rest.

And

The Authors Epistle

And let not the concealing, or rather the figurative Describing of my last and Principal Secret, withdraw your good and thankful acceptation, from all that go before; on which I have bestowed the plainest and most familiar phrase that I can: for, Jo. Baptista Porta himself, that gallant and glorious Italian, without craving any leave or pardon, is bold to set down in his *Magia Naturalis*, amongst many other conclusions of Art and Nature, four of his Secret Skills, (viz. concerning the Secret killing of Men, the precipitation of Salt out of Sea-water, the multiplying of Corn two hundred fold, which elsewhere I have discovered: and the puffing up of a little past, to the bigness of a foot-ball) in an obscure and Ænigmatical phrase. And I make no question, but that if he had known this part of Vegetable Philosophy, he would have
penned

To the Reader. 11

penned the same as a Sphinx, and rolled it up in the most cloudy and darksome speech that he could possibly have devised.

This Author, I say, hath emboldened me, and some Writers of more worth and higher reach than himself, have also charged me not to disperse or divulgate a secret of this nature, to the common and vulgar eye or ear of the world.

And thus having acquainted you with my long, costly, and laborious Collections, not written at adventure, or by an imaginary conceit in a Scholars private Study, but wrung out of the earth by the painful hand of Experience: and having also given you a touch of Nature, whom no man as yet ever durst send naked into the world without her veil; and expecting, by your good entertainment of these, some encouragement
for

The Authors Epistle, &c.

*for higher and deeper discoveries here-
after, I leave you to the God of Na-
ture, from whom all the true light of
Nature proceedeth.*

H. P. Knight.


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A N

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THE

I

THE
GARDEN
OF
EDEN.

OR,
A brief Description of all
sorts of *Fruits* and *Flowers*,
with means how to advance
their Nature and Growth in
ENGLAND.



Shall not trouble
the Reader with
any curious Rules
for shaping and
fashioning of a *Garden* or *Or-
chard*; how long, broad, or
high, the Beds Hedges, or
Borders should be contrived;
For every man may dispose
it as his House or quantity
of

of ground requires. And (to deal freely) I look on such work as things of more facility than what I now am about. Every Drawer or Embroiderer, nay (almost) each Dancing Master may pretend to such niceties ; in regard they call for very small Invention, and less Learning. I shall therefore speak to that which common searchers pass over, or never aimed at, being somewhat above their reach, who neglect the cause of what they find effected. Yet I shall begin with the ground, soil, or earth it self, as the Foundation of all ; still confessing what light or assistance I had from those who imployed their hours this way as well as my self.

2. Break

2. Break up your ground, and dung it at *Michaelmas*. In *January* turn your ground three or four times, to mingle your dung and earth the better, rooting up the weeds at every time. Proved by Mr. T. T.

Tempering the ground.

3. In Winter time, if you cover the ground which you mean to break up in the Spring, with good store of Fern, it keepeth down grass and weeds from springing up in Winter, which would spend some part of the heart of the ground, and it doth also enrich the ground very much, for all manner of Roots and Herbs. By Mr. *Andrew Hill*. Ashes of Fern are excellent.

Fern to enrich ground.

4. *Quare*, of enriching ground

Soot to enrich ground.

ground with Soot, which Mr. *Stutfield* (that Married my Lord *North's* Brothers Daughter) assured me to have found true in Pasture grounds, the same only strewed thinly over.

Shavings
of horn
to enrich
ground.

5. Shavings of Horn strewed upon the ground, or first rotted in earth, and (after) that earth spread upon the ground, maketh a Garden ground very rich. *Probatum at Bishops Hall, By H. P.*

Onions
and Bay-
salt.

6. Onions and Bay-salt sown together, have prospered exceeding well.

Age of
seeds.

7. The surest way to have your seeds to grow, is to sow such as are not above one year old. *T. T.*

Herbs
with great
heads.

8. If Herbs be nipped with the fingers, or clipped, they will

will grow to have great heads, T. T.

9. Choose such seeds as be heavy, and white within, T. T. Choice of seeds.

10. Swines and Pidgeons dung are good for pothearbs, and sifted ashes laid about them, killeth snails, T. T. Dung for pothearbs
To kill Snails.

11. If you would have Garlick, parsnep, radish; turnep, carot, &c. to have a large root, tread down the tops often, else the sap will run into the leaves, T. T. Roots made large.

12. Take the cutting of a Vine from a branch that spreadeth most in the midst of the Tree, and not from the lowest nor the highest branch, having five or six joynts from the old stock, and it would be a cubit long or more: plant it in Choosing of a Vine cutting.
Vine when to plant.

C Octob.

October or March. T. T.

Young
Vines to
proin.

13. Proin not your young Vines until they have had three years growth. T. T.

Bayes to
plant.

14. Every slip of a Bay tree will grow ; strip off the great leaves, and set them in March when the sap begineth to rise. T. T.

Eldern to
plant.

15. Every plant of an Eldern will grow. T. T.

Leeks to
grow
great.

16. First, put some good fat dung into water, and therein water your Leekes one night, and make your beds of good fat dung, that the dung may be a foot at the least in depth : then cover the bed with Fern, and set the Leeks with a great planting stick, and fill not the holes with earth, but water them once in two dayes

days and no more ; after this manner of setting I have seen Leeks : as great as the stemme of a Spade. T. T.

17. Sow Lettice in *August* for Winter. T. T. Lettice to sow.

18. After the Lettice is all blown , and some of the bolles begin to bear a white poff , then cut off the whole great stem , and lay it a drying in the Sun : and when it is dry, beat it up and down with thy fist upon a board , and put altogether in a dish , and blow away softly all the dust. T. T. And if you sow or set your Lettice in the shade, they will be very great. Lettice to grow great.

19. When it hath bolles, cut it up , and lay all the herbs to dry in the shadow , then bear it out. T. T. Parflane seed to gather.

C 2 20. Straw-

Wood
Strawber-
ries into
Gardens.

Watering
of straw-
berries.

Roses
grafted
upon
what
stock.

pompions
to grow
great.

20. Strawberries which grow in woods, prosper best in Gardens: and if you will transplant them forth of one Garden into another, then enrich the last ground by watering the same either with Sheeps dung, or Pidgeons dung infused in water; by *Master Hill*.

21. The musk and yellow Rose, and all those double and centuple Roses, may well be grafted in the bud upon the Sweet-brier. By *Mr. Hill*.

22. If you would have Pompions to grow exceeding great, first plant them in a rich mold, then transplant those sets into other fat mold, watering them now and then with the wa-
ter

ter wherein Pidgeons dung hath been infused, then take away all the hang-bies, maintaining only one or two main runners at the most, and so you shall have them grow to an huge bigness. Proved by Mr. Hill. You must nip off these side branches about blossoming time, with their flowers and fruits; and take heed you hurt not the heads of the main runners, for then your pompions will prove but dwindlings.

23. In winter time raise little hills about your Artichokes close to the leaves, because they are tender; and if any extream frosts should happen, they might
 C 3 other-

Artichokes from frost. See this in Numb. 26. 58.

otherwise be in danger to per-
ish.

Muskrose
to beare
late.

24 If you cut away the
old branches of a Musk-
rose, leaving only the
shoots of the next year to
bear; these shoots will
bring forth Musk-roses the
next year, but after all o-
ther Musk-rose Trees. By
Mr. Hill.

Roots in
their best
strength.

25. The roots of every
Tree and Plant, are most full
of sap when their tops or
heads are most green and
flourishing: and when the
bark of the Tree will pill
and loosen from the body,
then will the rind also loo-
sen from the root; and
when the tops begin to wi-
ther or stand at a stay,
then do the roots likewise
And

And therefore that common opinion, that roots are best and of most force in Winter, is erroneous. So as if I should gather any roots, for the use of Physick or Chirurgery, I would gather them either at their first putting forth of leaves, or else between their first springing, and the springing up of their branches, when they begin to encline towards their flowring. By *A. H.*

26. If every evening you lay a great Colewort or Cabbage leaf upon the top of every Artichoke, this will defend the Apple from the violence of the frost. By *Goodman* the Gardiner.

Artichokes
from
frost.
23. 58.

27. A branch of Box or Rose-

Flowers
or leaves
gilded &
growing.

Quare, of
Ifinglafs
dissolyed.

Rosemary will carry their leaves gilded a long time fair, notwithstanding the violence of Rain, if you first moisten the leaves with the gum of Mastick, first dissolved in a hard Egg according to art, and leaf-gold presently laid thereon. Do this in a Summers day, when all the dew is ascended, and when the Sun being hot, may presently harden the Mastick, and so bind down the gold fast unto it. *Quare*, if Myrrhe and Benjamin will not do the like, dissolved as before.

Flowers
candied
as they
grow.

28. Make gum-water as strong as for Ink, but make it with Rose-water; then wet any growing Flower therewith, about ten of the clock

clock in a hot Summers day, and when the Sun shineth bright, bending the Flower so as you may dip it all over therein, and then shake the Flower well; or else you may wet the Flower with a soft Callaver Pensil, then strew the fine searced powder of double refined Sugar upon it: do this with a little box or searce, whose bottom consisteth of an open lawn, and having also a cover on the top, holding a Paper under each Flower, to receive the Sugar that falleth by: and in three hours it will candy, or harden upon it; and so you may bid your friends after dinner to a growing banquet: or else you may cut off these
Flowers

ers so prepared, and dry them after in dishes two or three days in the Sun, or by a fire, or in a stove; and so they will last six or eight weeks, happily longer, if they be kept in a place where the gum may not relent. You may do this also in Balm, Sage, or Borrage, as they grow.

A Garden
within
doors.

29. I hold it for a most delicate and pleasing thing to have a fair Gallery, great Chamber or other lodging, that openeth fully upon the East or West Sun, to be inwardly garnished with sweet Hearbs and Flowers, yea and Fruit if it were possible. For the performance whereof, I have thought of these courses following.

First

First, you may have fair
sweet Marjerom, Basil, Car-
nation, or Rosemary-pots,
&c. To stand loosely upon
fair shelves, which pots
you may let down at your
pleasure in apt frames with
a pulley from your Cham-
ber window into your
Garden, or you may place
them upon shelves made
without the Room, there to
receive the warm Sun, or
temperate Rain, at your
pleasure, now and then
when you see cause. In eve-
ry window you may make
square frames either of Lead
or of Boards, well pitched
within: fill them with some
rich earth, and plant such
Flowers or Hearbs therein as
you like best; if Hearbs, you
may

may keep them in the shape of green borders, or other form. And if you plant them with Rosemary, you may maintain the same running up the Transomes and movels of your windows. And in the shady places of the Room, you may prove if such shady plants as do grow abroad out of the Sun, will not also grow there: as sweet Bryars, Bays, Germander, &c. But you must often set open your Casements, especially in the day time, which would be also many in number; because Flowers delight and prosper best in the open Air. You may also hang in the Roof, and about the sides of this Room, small Pom-

Pompions or Cowcumbers, pricked full of Barley, first making holes for the Barley (*quere*, what other seeds or flowers will grow in them) and these will be overgrown with green spires, so as the Pompon or Cowcumber will not appear. Barly growing without earth. And these are *Italian* fancies hung up in their Rooms to keep the Flies from their Pictures: in Summer time, your Chimny may be trimmed with a fine bank of Moss, which may be wrought in works being placed in earth, or with Orpin, or the white Flower called *Everlasting*. And at either end, and in the middest place one of your Flower or Rosemary pots, which you may

may once a week, or once every fortnight, expose now and then to the Sun and Rain, if they will not grow by watering them with Rain-water; or else, from plat-forms of Lead over your windows, Rain may descend by small Pipes, and so be conveyed to the roots of your Hearbs or Flowers that grow in your windows. These Pipes would have holes in the sides, for so much of them as is within the earth, and also holes in the bottom, to let out the water when you please in great showers. And if you back the borders growing in your windows with loose frames to take off and on, within the
inside

inside of your windows, the Sun will reflect very strongly from them upon your Flowers and Hearbs. You may also plant Vines without the walls, which being let in at some quarrels, may run about the sides of your windows, and all over the sealing of your Rooms. So may you do with Apricot Trees, or other Plum Trees, spreading them against the sides of your windows. I would have all the pots wherein any Hearbs or Flowers are planted, to have large loose squares in the sides; and the bottoms so made, as they might be taken out at ones pleasure, and fastned by little holes with wiers unto their pots, there

Pots for flowers of a good fashion. See this also Num. 56.

thereby to give fresh earth
when need is to the roots,
and to remove the old and
spent earth, and so in your
windows: see more of this
in *Numb. 30.*

Roses or
Carnati-
ons in
winter.

30. To have Roses or
Carnations growing in
Winter, place them in a
Room that may some way
be kept warm, either with
a dry fire, or with the steam
of hot water conveyed by a
pipe fastened to the cover
of a pot, that is kept see-
thing over some idle fire,
now and then exposing
them in a warm day, from
twelve to two, in the Sun,
or to the rain if it happen
to rain; or if it rain not in
convenient times, set your
pots having holes in the
bot-

bottom in pans of rain-water, and so moisten the roots.

I have known Master Jacob of the Glass-house to have Carnations all the Winter by the benefit of a Room that was near his Glass-house fire; and I my self, by nipping off the branches of Carnations when they began first to spire, and so preventing the first bearing, have had Flowers in Lent, by keeping the pots all night in a close Room, and exposing them to the Sun in the day time, out at the windows, when the wether was temperate: this may be added to the Garden (mentioned *Nu. 29.*) to grace it in Winter, if the room stand conveniently

veniently for the purpose.

31. You shall oftentimes preserve the life of a Carnation or Gilliflower growing in a pot, that is almost dead and withered, by breaking out the bottom of the pot, and covering the pot in good earth, and also the old stalks that spring from the roots; but every third or fourth year, it is good to slip and new set them.

Orchard
of dwarf
Trees.

32. If you make an Orchard of dwarf-Trees, suffering none of them to grow above a yard high; then may you strain course Canvas over your Trees in the blooming time, especially in the nights and cold mornings, to defend them from the frosts: And this Canvas

Canvass being such as Painters use, may after be sold with the loss only of a penny upon the Ell. You may use it only for Apricots, and such like rare fruit whose blossoms are tender; or else to backward them after they be knit, if you would have them to bear late when all other Trees of that kind have done bearing. In this dwarf Orchard I would have the walks between the Trees, either paved with brick, or gravelled, and the gravel born up with bricks, that the Sun might make a strong reflection upon the Trees, to make them bear the sooner. And to bring forth the better digested Fruit, I

D 2 would

Viney ard
to plant.

would also have the plot so chosen out, that all Easterly and Northerly winds may be avoided by some defence. I would have it but a small Orchard; and if it were walled in, it were so much the better, all Help this Orchard with the best artificial earths and waters that are. I think a Vineyard may thus be planted, to bring forth a full, rich, and ripe Grape: or if you could happen upon a square pit of a yard deep, whose banks are sloping, and whose earth hath been Philosophically prepared (as before *Num. 10.*) and that your Trees were bound sloping to the sides of your Orchard, and backed with boards, or lead, for
re-

reflection, that for your Trees
 would prosper and bear
 most excellent fruit: And to
 keep your Trees low, when
 your stock is at such height
 as you would have it, nip
 off all the green buds when
 they come first forth, which
 you find in the top of the
 Tree, with your fingers;
 and so, as often as any ap-
 pear in the top, nip them
 off, and so they will spread,
 but not grow tall; even as
 by nipping off the side buds
 only, you may make your
 Tree to grow streight and
 tall, without spreading,
 till you see cause: And
 thus with your fingers
 only, and without any
 tooles, you may keep your
 young Trees growing in

Trees
 growing
 either
 high or
 low.

what form you please.

Early
Fruit.

33. To have early fruit, you must have an especial care to plant or graffe such fruits, as are the earliest of all other, and then add all artificial helps thereto.

Old trees
recover-
ed.

34. Two quarts of Ox-blood or Horse blood for want thereof, tempered with a hat full of Pidgeons dung, or so much as will make it up into a soft past, is a most excellent substance to apply to the principal roots of any large Tree, fastening the same about them, after the roots of the Tree have taken air a few days, first, by lying bare: and it will recover a Tree that is almost dead, and so likewise of a Vine. For this will

Vines re-
covered.

will make a decaying Tree or Vine to put forth both blossoms and fruit afresh. This must be done to the Tree about the midst of *February*, but apply it to the Vine about the third or fourth of *March*. This is of Mr. *Nicholson* Gardiner.

35. Get a load or two of fresh Horse dung, such as is not above eight or ten days old, or not exceeding fourteen: lay it on a heap till it have gotten a great heat, and then make a bed thereof an ell long, and half a yard broad, and eighteen inches high, in some Sunny place, treading every Lay down very hard as you lay it; then lay thereon three inches thick of fine black
 D 4 sifted

Ordering
of the
Musk-
Mellon.

sifted mold; prick in at every three or four inches distance a Musk Mellon seed, which hath first been steeped twenty four hours in Milk: prick the top of your bed full of little forks of wood appearing some four or five inches above ground; upon these forks lay sticks, and upon the sticks so much straw in thickness, as may both keep out a reasonable shower of rain, and also the Sun, and likewise defend the cold (some strain Canvas sloopewise onely over their beds) let your seeds rest so untill they appear above ground, which will commonly be in six or seven days. You must watch them carefully when they first

first appear; for then you must give them an hours Sun in the morning, and another in the afternoon; then shall you have them shoot an inch and a half by the next morning; then strew more fine earth about each stalk of such plants as have shot highest, like a little hill to keep the Sun from the stalks: for if the Sun catch them, they perish; and therefore you shall often see the leaves fresh, when the stalks wither. Heighten your hills, as you shall perceive the stalk to shoot higher and higher. The plants must remain till they have gotten four leaves, and then remove them, taking up earth and dung together

The shortest way is to buy plants and set them.

gether carefully about every root; make a hole fit for every of them in good ground, placing them (if the ground serve) upon an high slope bank, which lyeth aptly for the morning Sun, if you may; let this bank be covered with field sand two inches thick all over, except near about the plants (this ripeneth and enlargeth the fruit greatly) then cover each plant with a Sugar pot, Gilliflower pot, or such like, having a hole in the bottom; or else prick in two sticks across, archwise, and upon them lay some great leaves to keep your plants from rain, Sun and cold. After they have been planted a day or two, you

you may give them two hours Sun in the morning, and two in the evening, to bring them forward; but, till they have stood fourteen days, be sure to cover them from 12 to 4 in the afternoon every day, and all night long. These pots defend the cold, and keep out all worms from spoiling your plants; and therefore are much better than leaves. Note, that you must defend them in this manner in the day time, untill your plants have gotten leaves broad enough to cover their stalks and roots, from all injury of weather; and then may you leave them to the hot Sun all the day long.

If

If there be cause, you must with rain-water, water them now and then, but not wetting the leaves. And if by any exceeding cold, or moysture, your plants do not shoot forward sufficiently, but seem to stand at a stay, Then take some blood and Pidgeons dung tempered (as before in *Num. 34.*) apply the same to the roots of the young plant; leaving som earth betwixt the roots, and the same will make them to shoot out very speedily. Remember to plant three plants together in each place, being round, and a little deep, and of the bigness of a round Trencher. Now when they have shot out, all their

their joynts (which you shall perceive when you see a knot at the very end of the shoot; which is somewhat before the Flowering time) then some do use to cover every knot, or joynt, with a Spade or Shovel full of fine and rich earth; and thereby each knot will root, and put forth a new shoot (*quare*, of the same course in Pumpions or Cowcumbers) by means whereof you shall have great increase of Melons.

Pumpions and Cowcumbers multiplied.

when your Melons are as big as Tennis Balls, then if you nip off at a joynt, all the shoots that are beyond them, the Melons will grow exceeding great; for then

Melons to grow great.

then the sap doth not run any more at wast. But some hold, that you shall have greater Mellons though not so many, if you suffer their shoots to run on without earthing the knots; and then, when you see your Mellons of the bigness of Tennis Balls (as before) then nip off a joynt, all the shoots that are beyond the Mellons, but meddle not with the chief runner. This of Mr. *Nicolson* Gardiner. Lay your young Mellons upon Ridge-Tiles, to keep them from the ground, and for reflection.

Early
Straw-
berries.

36. Make a high bank; slopewise like a penthouse, that openeth to the Sun, and is by some means defended

fended from all hurtful winds: plant your Strawberries therein, and water them with the infusion of some apt dung, now and then, when the weather is dry.

37. Bow down the branches of Roses, having buds upon them, into a vessel of wood pitched, standing within the ground, to keep them long upon the stalk, or to prevent frosts if you see cause.

Roses to
bear late,
and from
Frost.

38. Quare, What Pidgeons dung and blood, applyed to the roots of Roses, or Carnations, will do, in the forwarding of their bearing.

Early
Roses &
Carnati-
ons.

39. Plant Roses, according to the manner set down

Early
Roses.

down for Strawberries, before (*Num.* 36) to have them before all others.

Carots,
Parsneps,
and Turneps kept
long.

40. Make a Lay of sand, and a Lay of Carot Roots, cutting away the tops close to the root, with some of the small ends of the Carots; do this in *October* or *November* in dry weather: and about the last of *December* where there is no frost, unpack them again; and if you will then keep them longer, you must pare off the shooting at the upper end of the root, and then lay them in sand. This out of *Gardiners Kitchen-Garden*, printed 1599. So of Parsneps and Turneps.

Roses
and
Flowers
back-
ward.

41. *Quare*, If binding the bark somewhat hard with

a packthred, or rather with Brawn-bands, will not keep Quare, of doing thus after the Rose is new budded.
 Roses, and other flowers and fruits, long from blowing, by staying the sap from rising.

42. To have roots prosper and grow great, you must trench your dung about the depth of your root which you would sow; and if the root once get into the dung, then it forketh, and gathereth *fibras*, whereas otherwise it will grow wholly into a long, round, and fair root, of Mr. *Andrew Hill*. Roots long and great.

43. But if you desire to multiply your seed, not respecting the roots, then mix your dung first well rotted with good mold, Seeds to multiply.
 E and

and therein sow your seeds and they will encrease much : so as for seeds the dung must lye in the top, and for roots in the bottom. By Mr. *Andrew Hill*.

Large Carrots, or parsneps.

43. Gather your Carot or Parsnep seeds, &c. from the highest spiring branches, and out of some friends Garden, where you may be sure of the best ; sow these seeds about *March*, or *April* : and at drawing time choose the fairest roots of all other ; cut off their tops somewhat low, and set them again, and then let them seed the next year ; then take the seeds from the highest tops and sow them, and so shall you have most fair and large roots.

This

This of Mr. *Hunt* ; the good horseman.

44. Take off the tops as far as the green goeth ; viz. till you come to the wood, from Carnations, Gilliflowers, &c. slit them upward thorough the nethermost joynt , thrusting between the joynts some fine searced earth , made first into pap ; and with the same pap close the ends round about as big as a Walnut : make holes in your pots, and put in your tops so earthed ; these do seldom or never fail. By Mistris *Hill*. Also, the old root is here preserved, and you may carry these tops thus earthed roo. miles in a box. *Quere*, if this secret will not also extend

A new planting of Carnations, wall flowers, and stock gilliflowers.

Plants to carry far.

to stock Gilliflowers, Wallflowers, &c.

Branches
to root,

45. Cut off a bough from any Tree, and two inches from the bottom, take away the bark round about, prick it into the ground, and it will grow. *Quere.*

To kill
Worms.

46. In the end of *February* or *March*, wet the ground first, and about eight or nine of the Clock at night, by Candle-light, gather up all the Worms in Dishes, and so you may destroy them.

Rich
mold.

47. A Rich mold for a Garden: See among the Trees. *Numb. 29.*

When to
set or sow.

48. Set or sow Kernels in *November*, Nuts in *February*, Stones of fruit in *March*, all in the increase of

of the Moon.

49. *Quere*, Of graffing Roses, the splicing way, and so of Thyme, Rosemary, Hypsope, &c. to be graffed in this manner, either one upon another, or graffing them upon the boughes or branches of Trees, if happily they will take.

One plant upon another, or upon a tree.

50. Whether the colour, sent, or tast, may be altered in a Flower or Hearb, by Art, see the Title, *Trees and Plants*, Num. 90.

Colour, sent, or taste of a flower altered.

51. Instead of privy Hedges about a Quarter, I commend a Fence made with Lath or Sticks, thinly placed, and after graced with dwarf Apple, and Plum Trees, spread abroad upon the stick.

Fence of fruit trees

E 3 52, When

White-
thorn
hedge.

52. When you would have a strong and speedy White-Thorne Hedge about your Garden, set your plant high and sloping, and not flat, after the common manner. Prick in the cuttings, with the slope side downward, that the Rain may not get in between the Wood and the Bark. Weed these Hedges twice every year, and as the sprouts do grow of some length, let them be platted or brayded upward from the Ditch; defend them from Cattel with a dry or dead hedge.

Carnati-
on seed to
gather.

53. Let Carnations or Gilliflowers shed their leaves, and leave the cods standing upon the Root till

till the end of *October*, viz. so long as you may for the danger of Frost: then cut off the stems with the cods upon them; stick them upright in some dry place in an upper Room, and so let them rest untill the Spring, then sow them. Your *Carnation* seed will prove a fair large pink, and bear in *Carnation* time. By S.

54. Your *Coleflower* seed will not ripen till *Michaelmas*, or a week after; let it stand so long or longer, if you fear not Frost, before you gather the seeds, which grow in yellow cups; and being ripe, are also yellow themselves.

Coleflower seed to gather & to plant.

Be sure you gather the cups before the seeds be
E 4 shed;

Cole-
flower to
bear late.

Shed; put these seeds with their cups or cods in a box, but cover not the box, and keep the box in some place from the Frost: prick them in about the full of the Moon in *April*, when cold weather is spent: remove them when they have gotten four leaves, and in the full of the Moon in any case. Remove some of them in several moneths, and so you may save them growing with *Coleflowers* till *Christmas*. Your ground cannot be too rich for them; the best removing is not till *June* and *July*, and those of least growth, are best to remove late, to bear in *Winter*. Cover each *Coleflower* in *Frosty* weather,

ther, every night with two of their great leaves, fastned in two places, with two wooden pricks. Do this also in cold gloomy days, when the Sun shineth not.

55. Graft the branches of Carnations the splicing way, as in small twiggs of Trees, placing upon each branch a several coloured Flower, but let the branches which you graft, be woody enough. By S.

Divers Carnations in one root.

56. Cause large Carnation pots to be made, viz. double in bigness to the usual pots, let them have ranks of sloping holes, of the bigness of ones finger, each rank one inch distant from another. Set in the midst of the pot a Carnation,

Stately pots for Carnations. As before Num. 29.

Birds,
beasts, py-
ramides
&c. to
grow
speedily.

tion, or a Lilly, and in every of the holes, a plant of Thyme or Hysop; keep the Thyme or Hysop as it groweth, even with clipping, or in the form of frets or borders, and set these pots upon fair pillars in your Garden, to make a beautiful shew. Also, you may either of stone or wood, make piramides, losinges, circles, pentagons, or any form of beast or fowl, in wood, or burnt clay, full of slope holes (as before) in Gilliflower pots; these being planted with hearbs, will very speedily grow green, according to the form they are planted in: And in this manner may you in two years space, make a high

high piramid of Thyme, or Rosemary. In hot weather they would be shaded with some strained Canvas from the Sun, * and watered now and then by some artificial means. Also, a fret or border may be cut out in Wood or Lead, and after placed in a Garden when the Hylop or Thyme sides are grown to some height to be let thorough the cuts, and always after kept by clipping, according to the work of the border, or fret: let the earth settle well before you sow your seeds; water with an infusion of dung, or good earth, because otherwise the earth within your molds will spend, and then your plants will decay.

*See after
in Num.
84.

Delicate
frets or
borders.

The wood
may be
laid in
some oyl
colour.

Earth
strengthened.

57. Sow

To sow
Anni-
seeds in
England.

57. Sow *Englisb* Anni-seeds when the Moon is at the full in *February*, or any time between the full and the change: if frosts will not suffer you to take the full Moon, hatch them in-to the ground, with a rake stricken thick upon them: then strew new horse-dung thinly upon the ground, to defend the seeds from the frost. These will ripen about *Bartholomew-tide*; then respecting the Moon as before, sow again, and these seeds will be ripe sooner than those which were sown in *February*. These seeds will also come up well, being self-sown, only break up the ground about them when they begin

gin to ripen. That ground which you would sow in *February*, break up about *Michaelmas*; let it lie and crumble all the Winter: then when you mean to sow, stir it up again, that it may be mellow; for, the mellowier the better. A black rich mellow ground is best, and they like well in a rich dunged ground: Proved by S.

58. Having well earthed your Artichocks, then strew upon them some fresh horse-dung, one inch in thickness, and so leave them all the Winter: By 23. 56.

Arti-
chocks
from
frosts.

59. Sow Onion seeds in *February*, within eight days after the full at the farthest (but the nearer the full,

Onion
seeds or-
dered.

fully, the better, so all will go to seed, or head, and not grow to Scallions: after you have sowed them, cover them as you did your Anniseeds, before in *Num.* 57. By s.

Early and
late Pef-
cods.

60. Sow the early Pease as near *Midsummer* as the Moon will suffer, if you would have them come about six weeks after *Micha- elmas*: but if you would have them ripe in *May*, then sow them in the beginning of *September*, somewhat before or after, as the Moon will give you leave: at the full is good, or three days before the full, and till eight days after the full, is also good: these will be ripe in *May*.
Make

Make your holes about one inch and a half deep, wherein you set your Pease; let the ground be rich, mellow, and ordered as before, (*Numb. 57.*) In Anniseeds, bear them up with sticks, as they do the Garden Pease; cover them after they be set with new horse-dung about half an inch thick all over; and (if you may possibly) plant them so, as that they may be defended from the North, and Northeast, by reason of some Hedge or Wall. *Quare*, of covering them with unfleakt lime powdered, after they have been steeped in some apt liquor a convenient time; By S.

61. Sow Coliander-seeds

in

Colianders to sow.

in *February*, respecting the Moon as in *Annisfeeds*, (*Numb. 57.*) but they need no dunging: By S.

Sap of
Briony, to
gather.

62. In *April* make a deep overthwart cut or gash into a Briony root, taking away the earth first from it; put in a Goose-Quil a little under the slit, sloping the Quil at the end which you thrust into the root, but first make a hole with your knife to get in the Quil, and so you may gather great store of the water of Briony, placing a Receiver under the Quil. By S.

Roses to
beare
late.

63. *Quare*, If one may not prevent the early budding of the Rose, by cross-hacking the bark (as in Trees to kill Moss, or to stay

stay their sap from rising.)

65. You may multiply many roots from a Province-Rose, and the double Musk-Rose, (*Quere*, of Carnations) if you buy a grafted Rose-Tree, that hath gotten many sprouts from the place grafted, and setting the root so as the body may lie sloping near the earth: then lay as many of the branches as you may conveniently into the earth, loosning every slip a little from the body, and pricking with an Aule about the joynt that is next the slip, from whence many sprouts will issue. And thus may you have great store of Province-Roses without grafting in the bud,

F be-

Roses and
Carnations
multiplied.

because each of them standeth upon his own root; whereas the bud is maintained from one root, which also maintaineth many other branches. By S. See before in *Numb. 53.*

Good
seeds to
know.

65. Put some of your seeds in a Sawcer of fair water, set it a while upon a Chafindish of Coals; and if they be good, they will sprowt in a short time, else not.

Seeds to
sprowt
speedily.

66. *Quare,* In what time seeds may be made to grow in earth, moystened with warm water now and then, and the same placed in a warm Room, over a Fornace, with a small temperate heat under the same.

67. Re-

67. Remove a Plant of Single-flowers doubled, Stock-Gilliflowers, when it is a little wooded, and not too green, and water it presently; do this three days after the full, and remove it twice more before the change. Do this in barren ground, and likewise three days after the new full Moon, remove again; and then remove once more before the change: Then at the third full Moon, viz. eight days after, remove again, and set it in very rich ground, and this will make it to bring forth a double flower; but if your Stock-Gilliflowers once spindle, then you may not remove them. Also, you must shade your plant

Tulipee
double.

plant with boughs for three or four days after the first removing; and so of Pinks, Roses, Daylies, Featherfew, &c. that grow single with long standing. In removing, break not the least root. Make Tulipees double in this manner. Some think by cutting them at every full Moon before they bear, to make them at length to bear double. *Number.* 71.

Miseltoe
to find.

Misel-
child.

68. By sitting upon a hill late in an evening, near a Wood, in a few nights a Fire-dark will appear; mark where it lighteth, and there you shall find an Oak with Missetoe therein, at the Root whereof there is a Misse-Child, where-

whereof many strange things
are conceived. *Beati qui non
crediderunt.*

69. Gather your Grapes at the full of the Moon, and when they are full ripe, slip each bunch from the stock whereupon it grew, and hang those bunches along by beams, in the roof of a warm chamber, that doth not open to the East, or to the North, and these will keep plump and fresh till our *Lady Day*, or thereabouts; or else with every bunch, cut off some of the stock whereupon the stalk grow, and then hang up the bunches. Both these ways be true. By S.

Grapes
kept long.
See after
in *Numb.*
82.

70. Make a little square or round hole in a Tree, or

Flowers
in Trees.

in some great arm thereof, of half an inch, or an inch deep, fill it with earth, sow therein some Rosemary seeds, Wall-flower, Carnation, or other seeds; and these will grow first in the earth, and after root in the sap of the Trees, and seem in time as if they were grafted.

Stock gilliflowers to continue.

71. Remove both double and single Stock-Gilliflowers, when they are half a foot high, and then they will stand six or seven years: whereas otherwise they will decay speedily: See before Numb. 67.

To remove rooted plants.

72. If you remove any rooted plants of Herb or Flower, though it be somewhat forward in the Summer,

mer; so as you do it in the evening, after the heat is past, and plant it presently, and water it, there is no danger of the parching heat of the Sun the next day. But in any case heave up the earth with the root carefully, so as you do not break the least sprig of any root; for then the sap goeth out of the plant, and it perisheth. This way you may recover great Gilliflower roots, and others, without danger: By S.

73. Cut your Roses after they have done bearing, so soon as the Moon will give you leave, viz. the fourth, fifth, or sixth day after the change, and so you shall have store of Roses again

Roses to
bear
twice.

gain about *Michaelmas*, or after. Take heed you cut no branch of a Rose so low, as that you leave no leading branches upon it: for that will hinder the bearing of the Roses exceedingly. It is also good in the after-said days after the change, to cut any Hedge, Arbour, &c. to make it grow the better: By S.

Hedge &
Arbour
when to
cut.

Early
Peascods.

74. If you would have Peascods before all men, sow the early Pease in *August*, three days before the full Moon, or within six days after, and these will come very early: By S.

Gilder-
land
Roses.

75. How to plant the Gelderland Rose: See among Trees and Plants, *Number 119.*

76. How

76. How to have Onion-seeds, Annisseeds, and other seeds, to keep full and plump: See among Trees: *Nemb.* 135. Seeds full & plump.

77. Sow at every wane before *Midsummer*, to have Radishes unseeded, and one under another; but at *Midsummer* wane sow Radish, Spynage, &c. but once, to grow till Winter unseeded; Proved by *Tomkins* the Gardiner. Radish & Spinage.

78. The double Piony, and Flower-de-luce, will grow of their own seed. By *Tomkins*. Piony & Flower-de-luce.

79. Lime beaten to powder, and mixed with Corn before it be sown, preventeth Rooks, and other Fowl, from devouring the same. Seeds from devouring.

Not used
usually

same. By my Cousin *Mathews* of *Wales*; *Quere*, If it do not also help to enrich.

Grapes
kept long.
Prove
this in
Cherries,
clusters of
Raisins,
Figs.

: 80. Gather your Grapes, as before : *Num. 69.* dry them in a Stove, till the faint water be spent, and so you may keep them all the year for your Table. *Quere*, If they will not plump up again at any time in warm water. *Quere*, of drying all manner of Apples, Plums, Pears, &c. this way, for lasting. Before *Num. 69.*

Straw-
berries
large.

about
the month
of June or

: 81. As soon as your Strawberries have done bearing, cut them down to the ground; and as often as they spire, crop them, till towards the Spring, when you would have them to proceed towards bearing: now and then as you cut them,

them, strew the fine powder of dried Cow-dung (*Quare* of Pidgeons dung) upon them, and water them when there is cause. Field Strawberries, this way, will grow two inches about in bigness, as I am credibly enformed. Enrich Carnation pots this way.

*After in
Num. 85.*

82. To water your Pyramides, Pentagons, Globes, Beasts, &c. made of Wood, or Lead, and overgrown with Herbs; as before in *Num. 56.* let there be placed a long and large Pipe of Lead, or Tin-plate, reaching from the bottom to the top; let the bottom be soldered up, and let it have divers holes in the sides, at a reasonable distance: then have an exceeding large funnel

Watering
artificial.

funnel of Tin-plate, to let into the Pipe at your pleasure to receive so much rain as will water the same sufficiently; and when it raineth not, you may also water thereby with some rain-water kept of purpose.

Arbour
aloft,

83. *Quere*, If Pompions planted in large pots, will not grow and bear fruit for then you may have an Arbour of them in an open Terras, Leads, or Gutter, having a frame to support the fruit. Enrich the earth, as before, *Num.* 83. now and then, to nourish the plant the better.

Musk-
Mellon to
prosper.

84. *Quere*, If Musk-Mellons will not grow, and bear in such pots, for so in a Leads or Terras, the Sun will shine strongly upon them;

them; and you may defend Frosts and cold Winds by streining of Canvas; water the pots with rain-water put into other pans, wherein you may place these pots when you want rain.

85. Cut your Roses when they are ready to bud in an apt time of the Moon, and they will begin to bud, when other Roses have done bearing: this is an excellent secret, if Frosts happen in budding time: for so may you have store of Roses, when others shall have few or none, and may then be sold at a high rate. This I proved the 18th. of March 1666. being a few days after the change, upon divers standards at *Bednal-green,*

Roses
late.

green, being extreemly nipped with Frosts, in budding time; and many of them did yield me great store of Roses, when the rest of my Garden did in a manner fail,

Store of
Roses.

86. Cut your Rose-standards in the twelve days, and not before: so they will bear exceeding well. Proved often by *Garret* the Apothecary, and *Pigot* the Gardener.

Flowers
from
frost.

87. Towards Winter, new earth your Gilliflowers, Carnations, and such other Flowers as you would defend from the violence of Winter; then whelme Carnation pots that are bottomless upon them, or having a great hole in the bottom; and by this means, neither the sharp Winds, nor the

the Frost, can easily pierce to their roots. I hold this to be a good course for the defence of Artichoks in Winter.

Artichoks
from
frost.

88. You may keep bunches of Grapes that are found and well gathered, in stone pots, covering them carefully with sand.

Grapes
kept.

Secrets in ordering Hops.

TO choose ground for a Hop-Garden, you must be sure it be not a moorish or wet Soyl (though such perhaps may content a Wild Hop) but a dry ground, if it be rich, mellow and gentle, is absolutely best. Yet a light mold (though never so rich) is unapt for this purpose, for the heaviest ground will bear the greatest weight of Hops. Place your Garden so at the Sun

Sun may have free access to it, either all day, or wormest part of the day. It must be guarded also from the wind, either naturally defended by Hills, which is best; or artificially by Trees: but your Trees must stand aloof, lest the the shadow of them reach the Hops, or drop wet upon them, which will destroy all. About the end of *March*, or beginning of *April*, take your roots from some Garden where they are yearly cut, & where the hills are raised high (for there the roots will be greatest) let each root be nine or ten inches long, let there be three joynts in every root, and of the last year's springing; but be sure no Wild Hops cumber the ground, which cannot be distinguished by the roots, but by the fruit, or stalk. Se-

SECRETS

IN THE

ORDERING

OF

Trees and Plants.



Dogs and Cats Dogs and
 applied to the catsto the
 roots of Trees roots.
 before the sap
 rise, have reco-
 vered many old decaying
 Trees, shred them.

2. Divers ways for the en- Rich
 riching of a ground, whereof ground.
 to make an Orchard, see a-
 mong Flowers, *Num.* 1, 2,
 3, 4, 5.

3. Gravely ground is to Ground
 G enriched.
 be

be dunged with chalk, and chalky with gravel, for lack of dung. *T. T.*

Box tree
planted.

4. Strip away the leaves from the boxen slip, and winde not the stem, but set it whole without winding. *T. T.*

Bayes to
plant.

5. Every slip of a Bay Tree will grow : strip off the great leaves, and set them in *March*, when the sap begineth to rise.

Eldern to
plant,

6. Every plant of an Eldern will grow. *T. T.*

Ground
enriched.

7. Sand enricheth a clay ground ; and clay a sandy ground.

Poplar to
grow.

8. Every slip of the Poplar Tree will grow.

Trees to
bush in
the top.

9. All Trees which you would have to grow thick at the top, and to bush there

there, cut or proin them in *May*: for they spring more in *June* and *July*, than all the year before or after.

10. Plant Cherries in *October*, *November*, *January* and *February*. T. T. Cherries when to plant.

11. Plant Quince Trees in *October*, *November*, *February* and *March*. T. T. Quinces when to plant.

12. Set Hasels and Pear Trees in *October*, *November*, *February* and *March*. T. T. Hasels & Pear trees when to plant.

13. Set Apple cornels evermore the end that is next the root downward, five fingers breadth between every cornel; moysten them often with water by sprinkling, and set the cornels in *March*. T. T. Apple cornels set.

14. Set Plumstones in *November*, six or eight in- Plumstones set.

ches deep in the earth. T. T.

Pine Apple
cornels set.

15. Set the Pine-Apple cornel (first steeped in water three days) in *October*, *November*, *February*, and *March*, four inches deep.

Peach
stones set.

16. Set Peach-stones the sharp end downward, in *November*, four or five inches deep. T. T.

Springs
& Plants
set.

17. Set springs and plants in harvest.

Branches
to root
in the
ground.

18. If a Plant put forth many stalks or branches from the root, and you would have each branch to root, then bear up the earth about them to some reasonable height, either with Tiles or Brickbats; and in that earth, every branch will root. (*Quare*, if your branch will root at any part

part but in a joynt, about the which also, with a great aule you must prick many holes even to the Wood,) This is a necessary secret in all such plants as be straight and stiff, and not apt to bow, or to be laid along within the earth. By Mr. Pointer.

19. How to recover an Old Tree or Vine, with blood, and Pidgeons dung, see among the Flowers, *Num.* 34.

Old Tree
or Vine
recover-
ed.

20. An Orchard of Dwarf-Trees, that may be defended from all Frosts, see among the Flowers, *Numb.* 32.

Orchard
of dwarf-
Trees.

21. How to have early fruit, see among the Flowers, *Numb.* 33.

Early
Fruit.

Fruit
growing
long.

Blossoms
from
frosts.

22. Plant Dwarf-Trees, and when the fruit is almost ripe, bow down their branches with their fruit upon them, into great earthen pots, or pitched tubs, either with bottoms, or without bottoms, the pots or tubs standing in the Earth; then cover them with boards and earth from the Sun, and the sap of the Tree will keep them growing a long time, as I suppose. Prove this in green fruit, ripe fruit, and almost ripe fruit; also in the blooming time, if you fear frosts bow down the branches with the blossoms, as before to defend them in *May*, from the injury of the weather: and by this help you may

may happily have fruit, when others shall want.

23. Put a Vine branch thorough a basket in *December*, choose such an one as is like to bear Grapes; fill the basket with earth, and when the Grapes are ripe, cut off the branch under the basket: keep the basket abroad, whilst the weather is warm; and within doors in cold weather, in a convenient place: Prove this in Plums and Cherries, &c.

Grapes growing long upon the Vine.

Plums & Cherries growing long.

24. Make divers holes with a Cro of Iron, round about the bodies of your Trees; and about *Alhallontide*, pour Ox blood into the holes, cover them with earth, and this will make

Trees to prosper.

Apricots
to prosper.

your Trees to prosper well.
Probatum in Apricot-Trees,
By Mr. *Andrew Hill*. If you
do this at the Spring, the
smell of the blood will of-
fend you ; and therefore this
practice is best for the Win-
ter season.

Speedy
woods.

25. Plant the shoots of
Sallow, Willow, Alder, and
of all swift growing Trees,
being of seven years
growth, sloping off both
the ends one way, and lay-
ing the sloped ends to-
wards the ground, let them
be of the length of a billet,
bury them a reasonable
depth in the ground, and
they will put forth seven
or eight branches, each of
which will become a Tree in
a short time. I take moyst
grounds

grounds to be best for this purpose: thus you may have speedy growing Woods.

26. To make any branch of a Tree to root, see among the Flowers. *Num. 45.*

Branches
to root.

27. Mix green Cowdung and Urine together, wash the Trees with a brush so high as you think meet, once in two or three months, and it will keep the Trees from barking with Beasts; Conies, &c. and the same doth also destroy the Canker.

Trees
from
barking
or canker.

28. Take off the rich crust of one Acre of ground, and therewith you may make any Garden, or Orchard ground, that is but a foot deep in goodness, of what

Rich
mold for
Orchard
or Gar-
den.

what depth you please to make the roots of your Trees to prosper the better.

Depth for
Trees.

29. In high grounds and sandy, set Trees deep: in low grounds and watry, plant them shallow; the shallower the better. By *Master Hill*. But by *Taverner*, you must set your Trees so, that the roots may spread in the upper crust, which is the fruitful part of the earth: This crust in some grounds is two foot; in some three foot; in some one foot; and in some but half a foot deep: see the reason more at large, in his Book, Pag. 34.

Proining
of Trees.

30. Lop, top, and proin all Trees in *January*, in the wane of the Moon, and pare

pare them over in *March*,
so shall the bark cover his
stock the sooner.

31. Slit the bark of all
Trees that are bark-bound,
in *February*, or *March*, in the
encrease of the Moon.

Trees
bark-
bound,
helped.

32. Refuse to graff, plant,
remove, lop, top, proin, to
slit the barks of Trees, or
set or sow Cornels, Nuts
or Stones, in weather frosty
or watry, and when the
wind shall be East or North,
or North-East. Yea, the best
Oak felled under such a
wind, will prove but wind-
shaken Timber.

Ill wea-
ther for
Orchard
works.

Oak
when not
to be fel-
led.

33. Small Crabstock of
three inches about, or less,
may be graffed.

Bigness of
crabstock.

34. Pear-stock, and
White Thorne-stocks of the
same

Bigness of
Pearstock
and white
Thorne.

same scantling, all of them about the length of twelve or twenty four inches.

Bigness
of wild
Cherry-
stock.

35. Wild Cherry stocks, three, four, or five foot long, and three inches about, little more, or less.

White
Plum-
stocks.

36. White Plum-stocks would be of the same bigness.

When a
stock is
to be graf-
fed,

37. When the stock is able to put forth in one year a shoot of a yard long, then is it of strength sufficient to bear a Cions; for then it sheweth to like the ground well; otherwise, it will never prove a fair Tree.

White-
thorne no
stock for
Pear or
Warden;
good for
a Medlar.

38. A Pear or Warden grafted upon a White-Thorne, will be small, hard, cappard, and spotted; but a Medlar may well be graf-fed

fed upon a White-Thorne.

Taverner.

39. The suckers of Quince ^{Suckers}
Trees, and Filberds, will ^{planted.}
prove well being planted.

Taverner.

40. For Chestnuts and ^{Nuts set.}
Wallnuts, set the Nuts only.

Taverner.

*Rules for inoculation, or graf-
fing in the bud.*

41. **I**F you graft in the ^{1 Close}
bud, be careful to ^{well in}
close the same well in the ^{the bot-}
bottom of the scocheon; ^{tom.}
for there the sap riseth that
maketh it to take. By *And-*
rew Hill.

42. From the eight of ^{2 Time of}
June untill the 24 is the best ^{grafting.}
time

time to graft in the bud in Plums and Cherries, but especially in Apricots; but the surest rule is to do this work when you find the bark to come easily from the body.

3 Instru-
ment to
graft
with.

43. Two parts of three in a Goose-Quil taken away in breadth, is an apt tool to take off a bud withall, without danger of hurting the bud. By Master *Pointer*. Some commend a tool of Ivory; some do only slip off the bud and the bark together.

4 Losenge-
wife.

44. Graffing, by taking off a bud losenge-wise, and setting the same in another like place upon a stock, is good. By Master *Pointer*. This is done at such time,

as is fit to graft in the Cions.

45. When your bud takes, then in *March* after, cut off all that groweth above it, stripping away all the buds that put forth: and that which remaineth serveth to leade up the branch of the bud to keep it straight, and to defend it from breaking with the wind.

What to do when the bud taketh.

46. If you graft two or three buds upon one Tree, and they all do take, maintain only the lowest, and preserve and strengthen the same with some nether branch, as before in *Num.* 45.

The lowest bud maintained.

47. A Cherry prospereth well upon a Plum stock; but not *è contra*: and therefore,

A Cherry upon a Plum-Tree.

fore, if you graft a Cherry in the bud upon a branch, or bough, of a Plum-Tree that doth bear, you may make the same Tree to bear both Plums and Cherries. Proved by Mr. *Hill*.

8 Graft-
ing Com-
passes.

48. A pair of Compasses made flat at the ends, and sharp with edges, is an apt instrument to cut away the bark for inoculation, both for a true breadth and distance all at once. And so likewise with the same you may take off the bud, truly to fit the same place again in the stock; some Compasses are made flat at one end, and sharp at the other.

9 Gelly
preserved
in the
stock.

49. You must have care in this grafting, not to hurt or bruise the gelly next the stock

stock which must minister
sap to your bud.

50. Also when; you have
taken off your bud, clip the
sides of the bark whereon
the bud standeth, with a
pair of Scissors, very even,
in a square form; or rather
somewhat longer than
broad: for if you cut the
bark, at the ends with a
knife, laying the inside up-
on any board, you will hurt
the gelly in the inside, and
then the bud will never
take.

10 Gelly
in the bud
preserved

51. Make the place ready
for inoculation, and remove
not your bud before you
mean to place it, for taking
of too much air.

11 Bud to
take no
air.

52. When you have cut
down the bark on either
H side,

12 How
to slit the
bark.

side, and likewise at the top, leave the bottom of the bark whole, and then slip down the bark; and between the bark and the Tree, put in the bud, and bind the loose bark of the Tree upon your bud, and by this means your grafting will take more certainly. The lesser your slit is, and the closer that your bud fitteth the slit, it is the likelier to take.

13 What
buds are
best.

53. Take off your bud from a sprig of the last years shoot, for that is best for this purpose. By Mr. *Andrew Hill*.

14 How
to slit the
bark.

54. Make an overthwart cut at the bottom, and then begin your slit upward, putting up your bud from the
the

the bottom of your slit, closing well at the bottom; this is contrary to the common course, which begineth at the top, with a slit downward.

Grafting of a Cions.

55. **A** Tool of Ebony, ¹Grafting
or Box, is bet- tool.

ter to open the bark than a Tool of Iron, if you would graft a Cions between the bark and the Tree. By Master *Pointer*: for *Mars* tainteth the sap presently.

56. Grafting whip-stock ²Splicing
wise, and letting in the Ci- way.
ons into the stock by a slit, is good for young Trees, that spring upon stones, or
H 2 Pip-

Pippins, being of three or four years growth, and not above. Some call this the splicing way.

3 Cleav-
ing the
body.

57. Grafting upon an old Tree, by cutting off the head, and one inch from the center by striking in a small Iron wedge, and as it cleaveth by following the same with your knife; and so on either side, placing of a Cions, sap to sap; this is a way of grafting used by Master *Pointer of Twicknam*.

4 Low
grafting.

58. Graft within a foot of the ground, if you would have the fruit to grow low, and easie to be gathered; and this is also thought a fit way to make your Cions to take, because the sap riseth speedily to the Cions.

59 Graft

59. Graft your Cions on ⁵ On that side the stock, where which side to it may take least hurt with graft. the South-west wind (because it is the most common, and the most violent wind that bloweth in the Spring and Summer :) so as that wind may blow it to the stock, and not from the stock.

60. If you would have ⁶ How to fair and kindly Cherry-Trees, have large set the stones of Cherries, of Cherries. the same kind as your bud or Cions is of, and at three or four years, you may graft thereon, according to the manner spoken of before, in *Numb. 57. viz.* great Cherries, upon stocks that carry great Cherries.

61. Some think it good, ⁷ What Cions is best,

H 3 that

that your Cions have some of the former years shoot with it, that it may be the stronger to graft, and abide to be put close into the stock; and perhaps it will forward the same in bearing.

8 Cions
put in
close.

62. It is the best way, to put in your Cions in the grafting as close and straight as you may: neither are you here to fear the pinching of the stock, unless it be where you graft in a deep cleft of a large body.

9 The
Cions
made the
stock.

63. So likewise you may graft upon a bearing bough of an Apple-Tree, a contrary Apple; and when that Cions is grown great enough to receive another graft, you may graft a contrary fruit thereon; but an Apple Cions doth

doth not agree with a Pear-
stock, (not *è contra*) nor a
Plum upon an Apple or
Pear stock, neither will any
Cions of a Fruit Tree take
upon an Elm stock; proved
by Master *Hill*.

Upon
what
stock to
graft.

64. A Quince may well
be grafted upon a Medlar
stock: and a Medlar will
grow, but not prosper so well
upon a Quince stock, be-
cause the Cions will out-
grow the stock. Proved by
Master *Hill*.

10 Quin-
ces upon
a Medlar.

65. Unless the uttermost
rind or bark of your stock
be very gentle and thin, it is
best to slit the same along:
but hurt not the innermost
bark when you graft between
the bark and the Tree. By
Mr. *Andrew Hill*.

11 Bark
when to
slit.

H 4 66. Be-

12 Preparing the Cions.

66. Before you graft your Cions, take away a little of the uppermost bark on either side the edge, but hurt not the greenish part.

13 When to graft deep.

67. If your bark and Cions are both straight, then may you graft the deeper into the stock, viz. four inches, and that is a very sure way to make the Cions to take, so as you ioyn sap to sap well; but if either the stock or Cions be crooked, then two inches are sufficient. By Mr. Andrew Hill,

14 Grafting at Christmas.

68. You may graft an Apple Cions at *Christmas*, so as you graft the same very deep into the stock, viz. four inches, or three at the least, and close it well; for, though the sap rise not, yet the

the moyſture of the ſtock is ſufficient to preſerve the Cions, untill the ſap do riſe. Proved by Mr. *Andrew Hill*.

69. Long Moſs, well bound about the head of your ſtock, and of an inch or more in thickneſs, is ſufficient alone to keep out both wind and water from the ſtock where the Cions is let in. This muſt be repaired again at *Midſummer*.

15 Graft
bound
with moſs

70. Cloſe your Cions with red or green wax, having a little butter therein about the ſlit: and this both keepeth out the wind, and maketh the ſap to creep under, and cover the ſlit the ſooner.

16 Cloſ-
ing the
Cions.

71. A Peach may well be grafted or inoculated in

17 Peach
upon
Plum-
ſtock.

a

a Plum stock, and will thrive better than upon his own stock.

18 One Tree let into another.

72. If two Trees grow together, that be apt to be grafted one into another, then let one branch into another workmanly joyning sap to sap.

19 Length of a Cions.

73. If you have three or four good buds next the foot of the Cions, that Cions is long enough to be grafted; and so you may make divers Cions of one branch, where you cannot get plenty of Cions.

20 Artificial wax to close with.

74. Close all your incisions upon small and young stocks, with a mixture consisting of green wax, or red wax: and if your wax be old, melt the same, and add

add some fresh Turpentine thereto, or else you may use Pitch instead of wax, adding Turpentine: but let there be always in your wax, one fifth, or one sixth part of Butter, to keep the same supple; and when you have applyed this salve close to the joynts, then strew thereon the fine powder of dried earth, which you must have always ready; and that keepeth it hard in the Sun-shine: This is the only composition to make the bark to cover the stock. You must first after your grafting, bind the stock and the Cions together, with the bands of Brawn, and then lay your tempered Wax thereon; and

and if the band continue whole, you shall cut it in sunder about *August* following. By *Andrew Hill*.

21 How
to carry a
Cions far.

75. You may carry your Cions in this manner, a long journey without endangering them : First, wax over the ends with the artificial wax, (mentioned before in *Numb. 74.*) then role them up in great store of green Moss moystened, and tye them, and then put them into a case or box of wood, and so carry them. By *Andrew Hill*. You may keep a Cions fourteen days or three weeks in grafting time, so as it be done before *March*, by sticking the same in your window only ; yet some will have the ends of them dipped

dipped in the compounded wax, as before in *Num.* 74.

76. Always be careful ^{12 Upon} when you graft upon your ^{large} stocks the splicing way, ^{fructed} that your stock be of as ^{stocks.} large a kind of fruit, or larger than the Cions, or else it will not be able to feed the Cions: or else you must graft upon larger stocks, if the Cions be of a large fruit, and the stock but of a small fruit.

77. Plant an Apricot in ^{23 Many} the midst of other Plum- ^{Apricot} Trees round about it, at a ^{Trees of} convenient distance; then ^{one.} in an apt season, bore thorough your Plum-Trees, and let in to every one of them, one or two of the branches of your Apricot-Tree, thorough

rough those holes, taking away the bark on both sides of your branches which you let in, joyning sap to sap, and lute the holes up with tempered loam; and when they are well knit, the next year cut off the branch from the Apricot Tree: and so you have gotten many Apricot Trees out of one. Take away in time all the head of your Plum Tree, and all other branches, maintaining only that which is gotten from the Apricot. But some commend rather the letting in of a branch of one Tree into the other, workmanly; for the more certain kind of grafting.

24 Obser-
vation in
stock.

78. Plant every stock
with

with one leading branch, at the least, to carry up the sap: and after your stock hath grown one year, and maketh good shew of liking the ground, then graft your Cions upon it, leaving one or two leaders; but none so high as to overtop your Cions: and when your Cions is well taken, then cut away your leaders, and all other spires; and so your Cions will prosper exceedingly. By *Andrew Hill*.

79. Some hold opinion, ²⁵ Head-
that if when others begin ing of
to graft in the slit, you do stocks, &
then cut off the head of Graffing
your stock, leaving one after.
branch near the head to
lead the sap, and then after
cold weather is all past, if
you

you graft in the slit, that so your stock and Cions will prosper far better, then if you had grafted the same in the slit at the first. By *Andr. Hill.*

But then you must remember to take away the leader, that the sap may more plentifully feed the Cions.

26 When
to cut
down a
Cions.

80. Some do cut off all their Cions in the Winter, *viz.* either in *November*, or *December*, and then lay them in earth; and in the new Moon of *March*, or *April*, they graft them, and they prove exceeding well; perswading themselves, that no knife is so sharp, but that it will hurt the bark or gelly of the Cions, if the
Cions

Cions should be cut down when the sap is up. This of Mr. Colborne, who commendeth this course, upon long experience. And if you graft those Cions upon such forward Trees, as have put out their sap very plentifully, they will prosper exceedingly well; because being hungry, and almost starved for want of nourishment, they take hold of the sap that ariseth from the stock, very eagerly.

Upon what stock to graft.

81. Note, that your stocks may put forth buds, yea, small leaves; and yet you may safely graft upon them.

27 Stocks when to graft.

82. If you would have your stocks of your young
1 grafted

28 Stocks to prosper.

grafted Trees to prosper, and grow exceedingly, then suffer the water-boughs to grow up with the stock, till the bodies be as big as your arm, and then prune them at your pleasure; for by this means the sap doth rise more lustily, when it hath many branches to draw from the root.

29 Late
grafting
yet with
advan-
tage.

83. You may graft in the Cions, a month after other men, and yet have a longer shoot than they, the same year, in this manner: cut off the head of your stock when other men do (which many times falleth out to be in very cold weather) then cover your stock over with your artificial wax,
(as

(as before in Numb. 74.)
and one month after, or
when all cold weather is past,
crop your stock one inch low-
er, and then graft your Ci-
ons ; and then (cold weather
being past) the sap will rise
very plentifully to maintain
the Cions. Proved by Master
Andrew Hill.

84. Graft not upon any
young stock, till it be able to
put forth a shoot of a yard
long in one year (which
sometimes will not happen ,
till it have been of two or
three years growth) for till
it put forth abundance of sap,
it will never feed the Cions
sufficiently. Proved by Ma-
ster *Andrew Hill.*

30 When
to graft a
stock.

85. The stocks of black
Cherry-Trees, are best to
I 2 graft

31 Stocks
for great
Cherries.

graft the great Cherry upon.
Proved by Mr. Colborne.

32 Store
of stocks.

86. To have your Nursery full of stocks to graft on, sow the stampings of Crabs, which are commonly full of Cornels. By Mr. Kirwin.

33 Ground
for a Nursery.

87. Let your Nursery consist always of a more barren ground then your Orchard, whether you mean to remove your stocks and grafts. So likewise, if you transplant any Fruit Trees, bring them always from a worse ground to a better, or else they will never prosper.

A rule for
transplanting of
Trees.

34 Stocks
stopped.

88. Slope your stocks which you mean to graft on, like Colts feet, before you graft them: for so the bark

bark will cover the sooner,
and the rain shooteth from
the stock the better. Proved
by Master *Colborne*.

89. If you would have
your graft to bear quick-
ly, one special help is, to
take it out of a bearing
branch.

³⁵ Cions
to bear
quickly.

90. At the beginning of
the year, and before the sap
do rise, you may graft in
the body of the stock, or by
way of splicing upon every
little branch of your Tree
(but always remember to
take off the top of your Ci-
ons, having any leaves up-
on it :) when the sap is up,
then you must graft be-
tween the bark and the
stock; and then the sap is
so plentifully risen, that

³⁶ The
times of
several
grafting.

the bark will easily pill from the body, then may you graft in the bud, or leaf. How to graft at *Christmas*. See before in *Numb. 69.*

37 Plants
upon
Trees.

91. To graft Roses, or Herbs upon Trees, see among the Flowers *Numb. 49.*

38 Fruit
without
stones, &
hidden
with
leaves.

92. Graft the small end of the Cions downward; and so of Pears and Apples; and they will have no coar. *Quere*, of Plums grafted upon a Willow, to come without stones. Also, such Apples and Pears thus grafted, will for the most part hang under the leaves, and not be seen, unless you come under the Trees. By s.

39 Apricot
grafted.

93. A grafted Apricot is the best: yet from the stone you

you shall have a fair Apricot, but not so good; and the grafted is more tender than the other. By S.

94. Graft a Medlar upon a Quince, and it will bring a fair and large Medlar. By S.

⁴⁰ A large Medlar.

95. A Cions of a Pippin, grafted upon a Crab-stock, is more kindly, and keepeth better, without touch of Canker, then being grafted upon a Pippin. By Mr. Simson.

⁴¹ A pippin upon what stock.

96. Trees that bear early, or often in the year, as Pear-Trees upon *Windsor-hill*, which bear three times in a year; these, though they be removed to as rich, or richer ground, yet they do seldom bear so early, or

Why trees transplanted do alter.

so often, except the soyl be of the same hot nature, and have the like advantages of situation, and other circumstances, with those of *Windsor*. And therefore commonly, the second fruit of that Pear-Tree being removed doth seldom ripen in other places. By Master *Hill*.

Colour,
sent, or
tast altered.

97. All those fantastical conceits, of changing the colour, tast, or sent of any Fruit, or Flower, by insufling, mixing, or letting in at the bark, or at the roots of any Tree, Herb, or Flower, of any coloured, or aromatical substance, Master *Hill* hath by often experience sufficiently controlled; and though some Fruits and
Flowers,

Flowers, seem to carry the sent, or tast of some aromatical body, yet that doth rather arise from their own natural infused quality, then from the hand of man.

98. Some do never graft between the bark and the Tree, but in old stocks.

Graft between bark and Tree.

99. Lop the branches of your Trees always in Winter, before the sap do rise within ten or twelve inches of the trunk; and in the Spring, when the sap is up, cut those branches close to the trunk: and so shall you both have your Tree lusty, because no sap is left in those vast branches (which would have been lost, if you had proined them according to the usual

How to lop.

all manner, in *March*, or *April*) and also the sap will then come purling out, and soon cover the Wood; whereby you shall avoid those blemishes in your Trees, which others procure by proining them in the Winter. By Master *Andrew Hill*.

To have
green
Trees in
Winter.

100. *Quare*, what Herbs, Flowers, or branches of Trees, may be grafted upon the Bay or Holly-Tree, or any such Tree as keepeth green to Winter, to make them also carry green leaves in Winter.

Orchard
ground to
order.

101. Pare your ground with a Shod Shovel, so often as any Grass or Weeds begin to put forth, both in your Nursery and Orchard;
and

and so shall you both keep the ground mellow, and the rain shall have better passage unto the roots of your Trees. By Master *Pointer*; who keepeth Conies in his Orchard, only to keep down the Grass low, because otherwise it would be very chargeable. Also, in Vineyards, the use is to turn up the ground with a shallow Plough, as often as any Grass offereth to spring: but I think, that prevention of Grass, both in Orchard and Vineyard, is much better, if it were not too costly.

Vineyard
to order.

102. Upon the *Epiphany*, by reason of a great storm, an Apple-Tree, that had not been very fruitful before,

Tree
rooted
higher.
See after
in 106.

was

was almost blown up by the roots at *Hackney*; and after with Ropes it was drawn upright, and the whole mounted, and the Root covered with earth; and that Tree, the next Summer, bore an exceeding great burden of fruit.

Wreath-
ed bodies
of Trees.

103. When your Apple Cornels are of two years growth, then set a long straight stick by each of them, winding the young stock about the stick by little and little as it groweth, and fastning it with bands under the stick, and so it will grow in a wreathed form.

Fruit en-
larged.

104. *Quare*, If nipping off the new and tender tops about blossoming time will

will not make Summer Fruit-Trees to blossom speedily, or to enlarge the fruit.

105. If an old Tree that is spent, and hath done bearing, be underpropped, so as the body sink not, and that the earth be after taken away from under all the roots, and instead thereof, good rich mold be conveyed into the void places, so an old Tree will flourish again, and bear fruit. See before in *Numb.* 103.

Barren
Trees to
bear.

106. The Lord *Zouch* in Winter, in the year 1597. (and Master *Andrew Hill*) thinketh moist weather is best, that the earth cleaving to the roots, may be also removed with them, the earth being fast bound with

Trans-
planting
old Trees.

with Fearn branches to the roots) removed divers Apple-Trees , Damson-Trees , &c. being of thirty or forty years growth, at *Hackney* : the earth was digged in a good large compass from the roots, the roots little hurt ; holes were prepared for each Tree before hand, enriched with fresh and good earth ; the branches and tops taken off almost close to the trunk ; and they were planted again in the same hout wherein they were removed ; and the roots placed towards the same point of the compass as they first grew. He had a few Damsons the first year, and all put forth leaves at *Michaelmas* after , anno 1598. 107. Blood

107. Blood laid at the roots of old Vines, hath been commended for an excellent substance to harden them, unto Mr. *Andrew Hill*. Old Vines recovered.

108. If you cut any Vines when the sap is up, presently cover the place with good store of Turpentine, and it will stay bleeding. Proved by Mr. *Melinus*. Bleeding of Vines stayed.
Some commend the straight binding of a packthread about the bark thereof; some sear with a hot Iron, and drop hard wax presently upon it.

109. By the opinion of some men, if outlandish fruit Trees be planted in *England*, they do strive to put forth blossoms, and to bring Early Fruits.

bring fruit at the same time with us, as they did in their natural places, unless the extremity of cold do nip or hinder them. And this seemeth to them to be the reason why the Black-Thorne at *Glassenbury* Abbey, did use to blossom at *Christmas*, because happily the plant was brought from such a Climat, as where it did blossom at the same time of the year.

Wet Orchard helped.

110. If your Trees stand in wet ground, som do advise to lay Lime on the face of the ground, to help the bearing of the Trees.

The Cions to prosper.

111. If whil'st you maintain some suckers to your stock, (because the stock is not yet so big as your arm) your

your Cions doth not prosper to your mind, then nip off the buds that grow upon the suckers, now and then in the midst, till your Cions thrive according to your own desire.

112. In proining of your True
proining?
Fruit-Trees, or of any other shrub or plant bearing fruit, you must always have respect, whether it bear his fruit upon the first, second, or third years sprout; for you must never cut away all the bearing sprouts, if you mean to have any fruit. As in Pippins, the third years sprout doth onely bear fruit; and in some other Fruit-Trees, onely the second years sprouts; in Gooseberries,
K the

the last years sprouts bear most. By Mr. *Andrew Hill*.

Timber
to grow
of any fa-
shion.

113. When your Trees are young, you may bow them to what compass you will, by binding them down with Packthread to any circular form, or other shape that pleaseth one best. And by this means your Timber will grow fit for Ships, Wheels, &c. whereby great wast of Timber in time would be avoided.

Apricots
to bear.

114. Mix Cow-dung and Horse-dung well rotted, with fine earth and Claret Wine-Lees, of each a like quantity, baring the roots of your Trees in *January, February* and *March*: and then apply of this mixture to the

the roots of your Apricot Trees, and so cover them with common earth: by this means, such Apricot Trees as never bear before, have brought forth great store of fruit. Prove this in other Trees. This of Mr. *Andrew Hill*.

115. Pears, Wardens, and Peaches, delight in Clay grounds.

Pear,
Warden,
Peach,
in what
ground.
How to
use the
roots in
settings.

116. When you plant any Tree, press not down the roots together, with laying earth confusedly upon them, but extend every branch by it self, and cover it loosely with earth, according to that form wherein it did first grow. By Mr. *Colborne*.

Apricot,
in what
ground.

117. Apricots like well

K 2

in

in sandy ground.

Dwarf-
Trees.

118. Some hold opinion, that if one set the slips of an Apple-Tree, and so of divers other Trees, that these will prove Dwarf-Trees. And so of the Tree that beareth a White Flower as big as a Rose, called the

*Gelder-
land Rose,*

Gelderland Rose.

Dwarf-
Trees.

119. From *May* to the end of *July*, you may take off the bark from any bough of a Tree, round about the bough four inches deep, if the bough be as large as a mans wrist; or else a less depth will serve. If the bough be less in compass, cover the bare place; and somewhat above and below, with loam well tempered with Horse-dung, binding down

down the loam with Hay, and brawn bands upon the Hay, and so let it rest till about *Alhallon-tide*. And then within two or three days of the first New Moon, cut off the bough in the bare place, but in any case cut not the green bark above it; and then set it in the ground, and it will grow to be a fair Tree in one year, according to the length of the bough. *Quere*, of watering the loam now and then. Yet in reason, me thinks it a likelier course, to clap a Gilliflower pot made of purpose in two halves, with a great hole in the bottom, about such an arm; and after you have bound the pot well with

wier, then to fill it with good earth, which you may better water in dry weather, than you can do the lump of loam. You may also use a twig no bigger than ones finger, in the same manner. Yet some do rather commend the binding of the loam, or earthing the Tree, with a pot about it, without taking away any bark at all, but only pricking many holes with a great aule, in that part of the bark which is covered with the loam or earth. You must remember to underprop the pot, or else to hang it fast to the Tree. *Quere*, if a branch must not root at a joynt.

How to
lop Elms.

120. If you cut off the
top

top or head of an Elm, it will not leave rotting downward, till it be hollow, and doat within: but an Oak will abide heading and not rot. Also, the boughs or branches of an Elm, would be left a foot long, next to the Trunk when you lop them. This of an expert Carpenter.

121. To avoid sappiness, Sappiness to avoid.
fell both the bodies and the arms of Oaks and Elms in *December* after the frost hath well nipped them: and so your Saplings, whereof rafters, spars, &c. are made, will last as long as the heart of the Tree, without having any sap. *By the same man.*

122. Take off a thin turfe Young Trees to grow.
of two foot, round about
K 4 each

each Tree newly planted, cover the same with Fearn, Pease-straw, or such like, a handful thick: water your Trees once a month, if the weather prove dry, with dung-water, or common water, that hath stood in some open pit in the Sun. This keepeth the ground loose from baking; whereby the Tree will prosper the better, and put forth shoots of three and four foot in one year: remember you do not set any Tree above one foot deep, or little more, and give each Tree some props for the first year, that the wind shake it not too much. And yet some, of good experience, do hold, that it skilleth not how much a young Tree

Tree be shaken (so as it be not blown up by the roots.) and that it prospereth so much the berter.

123. Quinces growing against a wall, lying open to the Sun, and defended from cold winds, eat most delicately. This secret the Lord Darcy brought out of *Italy*. *Quere*, of all other Fruits.

Delicate
Quinces.

124. Set Peach-stones in a dry ground, where there is no water within three or four foot; for this Tree hath one root that will run deep into the ground: and if it once getteth into the water the Tree dyeth. The stone bringeth forth a kindly Peach. Set Peach and Apricot stones in pots of earth, within doors in *February*; keep

Peach &
Apricot
stones to
set.

keep the earth moist, by watering now and then; transplant them in *March* into your Orchard. By S.

Sap of
Trees to
gather.

125. In the end of *March*, gather the sap of the Trees within a foot of the ground: but take off the first bark, and then slit the white bark overthwart-wise, even to the body of the Tree; but slit only that part of the bark which standeth South-West, or between South and West, because little or no sap riseth from the North, or North-East side. After you have slit the Tree, open the slit with your knife, so as you may let in a leaf of a Tree, first fitted to the breadth of the slit; and from this the sap will drop, as it doth

doth in filtration. Take away the leaf, and the bark will close again ; earthing it with a little earth upon the slit. By S.

126. Cut away all the idle shoots of the last year, in your Apricot and Cherry-Trees, before *Christmas* some three weeks, to make your fruit the fairer.

Fair Apricots & Cherries.

127. If you would stay the sap of Trees from rising, to make your Trees to blossom later, thereby to avoid frosts in blooming time, then hack cross-wise , viz. overthwart the Tree, upon so much of the Tree as is within the ground, even down to the root, and then cover it again with earth. Hack it very thick, even tho-

To stay blossoming.

thorough all the bark to the very Wood, in the new Moon three weeks before *Christmas*, if they be Apple-Trees, Pear-Trees, or Warden-Trees; but for Apricots, do this rather in the full of the Moon, next before *Christmas*; but cross hack your Cherry-Trees and Peach-Trees in the new Moon next after *Christmas*: and so you shall have your blossoms and by consequence your fruit, come later than other mens do, because the sap cannot rise. I think you must also hack the maine root. *Qnare,*
By S.

Green
Trees in
Autumn.

128. If you would make a Tree in a short time to cast his leaves, and thereby to bring forth young leaves,
which

which will last upon the Tree fresh and green, when all other Trees have lost their leaves; then cross hack the bark, close to the wood about *Midsummer*. In all the cross hackings here mentioned, let every of them be half an inch, or thereabout, distant one from another; and every rank of hacks, one inch above another, or thereabout. Also, this practice to avoid the fall of the leaf, must be done but every second year to any Tree, for fear of destroying the same.

Quere, if the Moon be here to be respected.

129. But if in *January*, on before the sap do rise, you hack the body long-wise, and not overthwartly, and that only thorough the first bark,

Bodies of Trees to enlarge Bark-bound,

bark, and no further; this will make the bodies of your Trees to swell, and burnish the better, to maintain their heads or grafts.

To kill
Moss.

130. And if by overthwart hacking you would only kill the Moss of Trees, then let your overthwart hacks be thorow the bark, even to the wood: and this you must do between *Alhal-lon-tide* and *St. Andrew's day*; viz. so soon as the leaves be off the Tree, both to avoid Moss, and to make barren Trees to bear. You must make these hacks with the nether corner, or point of a small Hatcher; so as every notch may be about half an inch long: and hack the body the height of a man;
viz.

viz. one row of hacks, two inches below one another, all over the body: but let there be a distance between the overthwart hacks, so as they may not meet in a round ring, like a circle, about the Tree: and by this means the uppermost bark whereon the Moss grew, will in time fall clean away, and the Moss with it, and the Tree will gather a new bark. And though the Tree be thus hacked but to a mans height, yet the Tree will bear much better the next year. But when your leisure serveth, cross-hack all the body in this manner, even to the trunk, as also a part of every great arm that groweth next the Tree:

Note,

Note, that in seven years the Tree will be bark-bound, and so Mossy again, as at the first: and therefore once in seven years you must renew this work. By S.

A Tree
to root
higher.

131. But if your Tree bear not, because it was planted too deep at the first, then take away the earth from the body of the Tree; and a little below the uppermost face of the ground, prick the body of the Tree clean thorough the bark, full of holes, with a pretty round aule or bodkin, of a reasonable breadth. Then cover the body with earth, and divers new roots will issue, to make the same fruitful.

Sap choaked.

132. And if your Tree bear not well, by reason that

that all the sap runneth into leaves, which is a common fault in divers Orchards, then to check the sap, cut off all the young roots that grow about the master roots; and cross-hack the body under the ground, and likewise the main roots, as before (*Num. 131.*) to avoid Moss, and cover the Tree with earth again: for by this means the sap is kept from rising up too plentifully. By *S.*

Barren
Trees to
bear.

133. All barrenness, or unfruitfulness in Trees, doth for the most part arise, either by reason of their Mossiness, whose cure is set down before in *Numb. 131.* or because they are bark-bound; whose remedy is also in *Numb. 130.* or because they were planted

Causes of
barren-
ness in
Trees.

too deep, whose remedy is in *Numb. 132.* or by reason that the sap, which should turn into fruit, runneth together, or for the most part into leaves: and this is remedied also in *Numb. 133.*

Apples
without
wrinckles

134. Gather not your Pippins till the full Moon, after *Michaelmas*; so may you keep them a whole year without shrinking: and so of the Grapes, and all other fruit; so of Onion-seeds, Anniseeds, & other seeds which you would keep full and plump. By S.

Respect
between
the stock
& Cions.

135. Let your Tree whereon you graft, be more forward than the Cions; *viz.* let it either have bigger buds than the Cions hath, or small leaves: but the Cions is best
that

that hath only red buds, and no leaves.

136. I have seen Cherries grow in clusters like Filberts, Cherries in clusters viz. 2, 3, 4, and 5, upon one stalk. *Quere*, if it be not performed in this manner; joyn 2, 3, 4, or 5. leaves with the buds in one slit together, by way of inoculation, and so leave them.

Here I will conclude with a conceit of that delicate Knight, Sir Francis Carew, who, for the better accomplishment of his Royal entertainment of our late Queen of happy memory, at his house at *Beddington*, led her Majesty to a Cherry-Tree, whose fruit he had of purpose kept back from ripening, at the least one month after all

Cherries had taken their farewell of *England*. This secret he performed, by straining a Tent or cover of Canvas over the whole Tree, and wetting the same now and then with a Scoop or Horn, as the heat of the weather required; and so, by with-holding the Sunbeams from reflecting upon the berries, they grew both great, and were very long before they had gotten their perfect Cherry colour: and when he was assured of her Majesties coming, he removed the Tent, and a few Sunny days brought them to their full maturity.

A
 Philosophical
 GARDEN:
 WITH

*Atouch at the Vegetable work
 in Physick, whose principal
 fire is the Stomach of the
 Ostrich.*

First, pave a square Plot
 with Brick, (and if it be
 covered with plaster of *Paris*,
 it is so much the better) ma-
 king up sides of Brick also
 plastered likewise : let this be
 of a convenient depth, fill it
 with the best Vegerable T:
 L 3 which

which you can get, that hath stood two years, or one at the least, quite within his own Sphere: make *contrition* of the same; and be sure to avoid all obstructions, imbibe it with *Aqua-coelestis* in a true proportion, grind it once a day till it be dry: being dry, let it stand two or three days without any imbibition, that it may the better attract from all the heavenly influence, continuing then also a *Philosophical contrition* every day (this grinding must also be used in the Vegetable work where the ♀ of Herbs is used instead of *Aqua-coelestis*) during all the time of preparation: then plant what rare Flowers, Fruits, or Seeds, you please therein. And (if my
Theory

Theory of Nature deceive me not) this h̄ so enriched from the heavens, without the help of any manner of soyl, marle, or compost (after one years revolution) will make the same to flourish and fructifie in a strange and admirable manner: yea, I am perswaded, that it will receive an *Indian* plant, and make all Vegetables to prosper in the highest degree, and to bear their fruits in *England*, as naturally as they do in *Spain, Italy*, or elsewhere.

So likewise of that Walnut-Tree, planted within the limits of the aforesaid Abby, which on *St. Barnaby's-Eve* standeth bare, and naked without leaves; and upon the day it self, richly clothed with his green vesture.

I could remember many *Philosophical* plants in *England*, were it not that the loss of *Ripley's* life, that renowned Alchymist, who suffered death (as the secret report goeth) for making a Pear-Tree to fructifie in Winter, did command an *altum silentium* in these matters : but it was the denial of his Medicine, and not the crime of Conjuraton, which was but colourably laid to his charge, that wrought his overthrow.

Nay, if the earth it self, after it hath thus conceived from the clouds, were then left to bring forth her own fruits and flowers in her own time, and no seeds or plants placed therein by the hand of man, it is held very probable (unless

less for the sin of our first Parents begun in them, and mightily increased in us, the great God of Nature, even *Natura naturans*, should recall, or suspend those fructifying blessings which at the first he conferred upon his Coelestial Creatures) that this heavenly earth, so manured with the Stars, would bring forth such strange and glorious plants, fruits and flowers, as none of all the Herbarists that ever wrote till this day, nor any other, unless *Adam* himself were alive again, could either know, or give true and proper names unto these most admirable Simples.

Also, in the work of fructification; I think that Corn it self

self may be so Philosophically prepared, only by imbibition in the Philosophers, *Aqua-vita*, that any barren ground, so as it be in nature kindly for Corn, shall bring forth a rich crop, without any matter added to the ground, and so with a small or no charge, a man may sow yearly upon the same ground. And he that knoweth how to lay his fallows truely, whereby they may become pregnant from the heavens, and draw abundantly that coelestial and generative vertue into the *Matrix* of the earth; this man, no doubt, will prove the true and Philosophical Husbandman, and go beyond all the Country *Coridons* of the Land, though never so well

well acquainted with *Virgils Georgicks*, or with Master *Bernard Palisie* his congelative part of rain-water, which he calleth the *Vegetable Salt of Nature*: wherein though he observed more then either *Varro*, *Columella*, or any of the ancient Writers in this kind, did ever dream of; yet doth he come many degrees short of this heavenly mystery.

Now, to give you some taste of that fire which the Philosophers call the *Stomach of the Ostrich*, (without which the Philosophers true and perfect *Aqua-vita* can never be made) you must understand, that it is an outward fire of Nature, which doth not only keep your Glass,
and

and the matter therein contained, in a true proportionable heat, fit for workmanship, without the help of any ordinary or material fire : but it is also an efficient and principal cause, by his powerful nature and piercing quality, to stir up, alter and exalt, that inward fire that is inclosed within the Glass in his own proper earth. And therefore here, all the usual Chymical fires, with all their graduations, are utterly secluded ; so as neither any naked fire, nor the heat of filings of Iron, of sand, of ashes, nor of *Balm. Mar.* though kept in a most exquisite manner, nor any of the fires engendered by putrefaction, as of dung and such like, no nor the heat of the Sun,

Sun, or of a Lamp, or an *A-
thanor* (the last refuge of our
wandring and illiterate Al-
chymists) have here any place
at all. So that by this fire and
furnace only, a man may
easily discern a mercenary
workman (if he deal in Vege-
tables only from a second
Philosopher: and if in any
thing (as no doubt in many
things) then here especially
*vulgaris oculus caligat pluri-
mum.*

This fire is by nature gene-
rally offered unto all, and yet
none but the children of Art
have power to apprehend it:
for, being coelestial, it is not
easily understood of an Ele-
mental brain; and being too
subtile for the sense of the
Eye, it is left only to the
search

search of a divine wit: and
here I leave it for this time.

The Physical use of this
fire, is to divide (a *Cælum*
terra, and then to stellifie the
same with any Animal or Ve-
getable Star, whereby in the
end it may become aquin-
tescence.

Here I had thought to have
handled that crimson colour-
ed Salt of Nature, so far ex-
ceeding all other Salts, in a
true, quick, and lively way,
which is drawn from the Phi-
losophers earth, and worketh
miraculous effects in mans
body; and withal, to have
examined that strange opini-
on which Doctor *Quercitanus*,
an excellent *Theorist* in Na-
ture, and a great Writer in
these days doth violently
maintain,

maintain, in his discourse upon *Salt-Petre*.

But because it is impertinent to this subject, and that I have discoursed more at large thereon in my Abstract of *Corn. Agrip.* his Book *De occult. Philos.* and for that *Quercitanus* doth shew himself to be a true Lover of *Hermes* Household, I will not strain my wit, to write against any particular person that professeth himself to be of that Family; although both he, and some others, as great as himself, must give me leave, whensoever I shall be forced in that Book to handle the practical part of Nature, and her process, happily to weaken some principles and positions, which both he and they have

have already published ; excusing my self with that golden saying of *Aristotle* ,

φίλῳ μὲν Σωκράτης, φίλῳ δὲ Πλάτων, ἄλλα φίλῳ τῇ ἡ ἀλήθεια.

Amicus Socrates, amicus Plato, sed magis amica veritas.

But I am affraid I have been too bold with vulgar wits, who take no pleasure to hear any man *altius philosophari*, than they can well understand ; and therefore I have compiled this Book in plain terms, of such a Garden and Orchard as will better serve for common use, and fit their wits and conceits much better.

F I N I S.

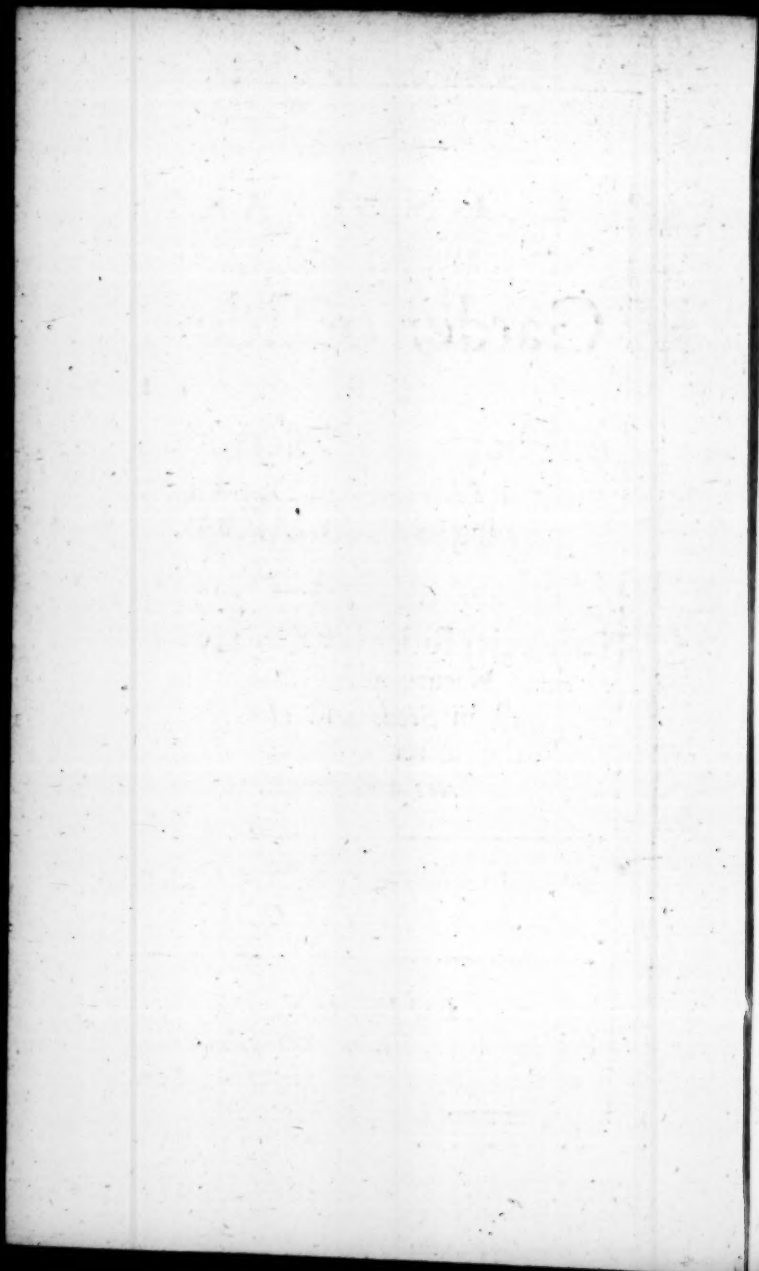
THE
SECOND PART
OF THE
Garden of Eden:

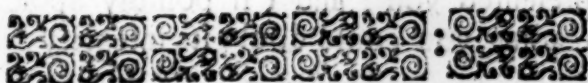
OR,
An accurate Description
of all *Flowers* and *Fruits* now
growing in *ENGLAND*.

WITH
Particular Rules how to advance
their Nature and Growth, as
well in *Seeds* and *Herbs*, as
the secret Ordering of
Trees and *Plants*.

By that Learned and great Obser-
ver, Sir *HUGH PLAT* Kt.

LONDON,
Printed for *William* and *John Leake*,
at the Crown in *Fleetstreet*, betwixt
the two Temple Gates 1675.





TO THE
READER.



I were very vain to commend the First Part of the GARDEN of EDEN which hath been so often welcomed into the world in so short a time ; for (without foolish Apologies , which are but officious lies) we can assure you it hath had four Impressions in less than six years. The benefit it brings is as well known to the *Country* as to the *London Stationer*. Only let me inform you, That a Second Part full as large as the First, is here

To the Reader.

presented you ; and (if possibly upon reading you could doubt its integrity) you may at pleasure see the Original Manuscript under the Authors own hand, which is too well known to undergo the suspicion of a counterfeit. Therefore if heretofore the First Part of the GARDEN of EDEN were a useful Book, this is now much more, when the GARDEN is enlarged, and far better stored. You will soon find if truth be not now told you.


A N

A N

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1


THE
SECOND PART
OF THE
Garden of E D E N.

Divers conceited Experiments in *Trees, Plants, Flowers, Herbs, and Fruits.*

Num. I.

Fruits and Flowers to come early, and before others, or late and after others, or to have them growing all the year.

sect. I.

 I R Francis Walsingham caused divers Apricot Trees to be planted against a South Wall, and their
B Branches

Planting
of Trees
against
Brick
Walls.

2 *Experiments in Trees, Plants,*

Branches to be born up also against the wall according to the manner of Vines, whereby his Plums did ripen three or four weeks before any other that grew at large in any Orchard, and had not the benefit of the Suns reflexion. Hereupon I do infer, That if every Tree were planted in a several Tabernacle, or such Concave as were aptest for the receiving and reflecting of the Sun-beams upon the Fruit; and the same also either lined with Lead or Tin-plates, or garnished with glasses of Steel or Cry stalline, that by such means, peradventure, the reflexion might be multiplied, to the greater forwarding of the Fruit, especially the Trees being Dwarf-Trees,

How to multiply the Sun-beams upon Trees.

Trees, whereby the Sun might reflect both from the sides and from the ground, unto the uppermost branch or bough of the Tree: And by these helps the Olive, Pomgranate, Orange and Lemon-Trees, and such like, might happily bear their fruit in our cold Climate. *Quare*, if these Walls did stand so conveniently, as they might also be continually warmed with the Kitchen fires, as serving for Baeks unto your Chimneys, if so they should not likewise find some little furtherance in their ripening.

2. *Quare* also, If wrapping of ropes of Hay about the bodies of the Trees to defend them from the winds, and other cold that happen-

Olive,
Pomgranate, Orange and Limon-Trees to bear Fruit

Sol and Vulcan meeting together in the Walls.

Trees wrapped about with Hay.

eth most in the night season.

Nourish-
ing Li-
quor, rich
Mould.

To pre-
vent the
frosts in
May.

Early
Fruit
without
the help
of Brick
Walls.

3. Water these Trees with nourishing and feeding Liquors, and give a new supply now and then of richer mould unto them; and if you will prevent the dangers of the frost, which they are subject unto in their blossom; then lay open the roots for a time, that the sap may not rise too fast; or if your Orchard consist of Dwarf-Trees, growing in great pots of stone, or vessels of wood, you may remove them from time to time as you see cause, and so preserve them from all injury of the weather.

4. And lest I should leave all other men destitute of early fruit, whose ability will
not

not serve to compass their Orchards with Brick Walls (which would prove an excessive charge) my advice is, that their Orchard should consist wholly of Dwarf-Trees, over which, being close compact together, they may spread a Canvas Tent removable at pleasure, or defending only the North, East, and North-East winds from them with Canvas Walls; which Canvas they may hire of the Upholsters after the rate of one penny the Ell for many moneths together; for notwithstanding this imployment it serveth the Painters turn sufficiently. Neither ought this course seem very chargeable unto us, if we do either consider the infinite number

Canvas
Tent.

Canvas
Walls.

of Trees that a small square will receive, if they be closely packed together; or if we do estimate the profit that will arise of such forward fruit, which will easily countervail the hire of our Canvas. And yet for our better encouragement herein, I have heard that also noted of our best experienced Practicers this way, That these kind of Dwarf-Trees are commonly more fortunate in their bearing, then our ordinary Trees, whose bodies are greater, and carry their heads so high into the weather; and it shall not be amiss, notwithstanding these Walls or covers, to place these Dwarf-Trees (especially if they grow in vessels removeable) either upon

Dwarf-Trees
more fortunate
then others.

Preparing
of the
ground for
Dwarf-Trees.

upon Pavement of Free-stone or Brick, or upon a platform of Gravel, whereby the Sun may reflect the stronger upon them, always provided that you have also care to keep them sufficiently moist, and from being withered or parched with the heat, (which you may easily prevent in the time of dry weather) by watering them continually by way of filtration out of apt vessels placed for the purpose. And though your Trees be fixed and growing in the ground, yet it shall not be amiss to have a flore of hard gravel round about them to help the reflexion of the Sun, so as you have care either to leave sufficient store of earth about the body of every

B 4 Tree,

The manner how
to water
them.

Experiments in Trees, Plants,

Tree, and the same earth to be laid in the form of a concave receptive, to receive such rain-water as falleth, and to convey that unto the root; or else if you will cover the whole face of the ground with gravel, you must then at the foot of every Tree thrust in a pipe of stone (for which purpose, and to avoid charge, the neck of those stone bodies wherein the Goldfiners do use to draw their strong water, will serve very aptly) which must receive a continual watering *per laneam linguam*, as before, to keep them moist : And here (if it were not for charge) I could wish all these Orchards that are replenished with Dwarf-Trees, to consist of small squares , so as they might

The big-
ness of
these Or-
chards.

might be ten or twelve yards every way in length and breadth, and no more; about which squares I would also erect the cheapest Wall that could be devised, which should not exceed three or four foot in height; the use whereof is so manifest, as that I shall not need to publish the same in any plainer terms. But if to have early fruit, we do neither regard labour nor charge, then let us build a square and close room, having many degrees of shelves, one above another, in which we may aptly place so many of these Dwarf-trees as we shall think good; in time of cold weather, we may keep the same warm in nature of a Stove, with a small fire being made

The height
of the
Walls of
this Or-
chard.

A Stove
to keep
Dwarf-
Trees in.

10 *Experiments in Trees, Plants,*
made in such Furnaces, and in
such manner as I will at all
times be ready to shew to
such as are willing to make
any use thereof; and if the
weather be fair and open, and
that the room be made full of
windows or open sides, we
may for such time use the be-
nefit of the Sun-shine, or carry
them abroad at our pleasure;
and for the forwarding of your
fruits, you shall not need to
begin this practice till the sap
begin to rise, and then but for
a few months only, except in
the night time, when we shall
fear any frosty or other nip-
ping weather. There be di-
vers persons whom this secret
doth fit very well, and may
perform the same without
expence of money, amongst
which

When to
place the
Trees in a
Stove,

A Stove
kept with
small
charge.

which number are all such as are forced in respect of there trade to keep any great or continual fires, as Brewers, Diers, Soap-boilers, Refiners of Sugar, and the owners of Glass-houses, and such like, who may easily convey the heat or steam of their fires (which is now utterly lost) into some private room adjoining, wherein they may bestow their Fruit-Trees to their greater pleasure and contentment. Neither do I think it an unseemly sight to have some dozen or twenty of these Dwarf-trees ranked in good order upon high shelves in our Winter Parlors, where we may also make a second use of our chargeable fires. Yet this caveat let me give by the

Winter
Parlors
made Or-
chards.

12 *Experiments in Trees, Plants,*

A caveat
for dwarf-
trees that
have been
tenderly
kept.

the way (which I learned by the experience of my friend who in one frosty night, by the negligence of his Servant, lost 20 of the fairest Carnation pots that I have seen, being all of them very full of buds, and many of them blown out in the dead of Winter, and all this happened by leaving them only one frosty night abroad) that when we have made our Dwarf-Trees thus tender, by defending them from all cold and hard weather, by a close and warm Stove, that we must be very careful, that if (to take the advantage of a shower of rain, or some other fair and Sunny weather, we happen to carry them abroad) that about the Sun-set, or rather somewhat before,

before, we convey them again to their place of refuge, and some think it necessary to expose them to the air only in rainy and temperate days, and rather, to lose the rain, then to set them abroad in a cold day. I hope I shall not here need to give any advice for the necessary watering of these Trees in their convenient time, because there is no man so ignorant, but that he knoweth that all Vegetables do receive both their life and nourishment from heat and moisture; only they may make their choice (if they please) of these several manners, and likewise of some of these compound liquors as are elsewhere in this Discourse handled more at large, whereby

Water-
ing the
Dwarf-
Trees in
the Stove.

14 *Experiments in Trees, Plants,*

whereby to water them in a more fructifying manner then any of our ordinary means doth afford, set your pots in pans of water that hath been before exposed to the Sun.

Vines to
bear
early.

Several
earths or
moulds.

5. The blood of beasts tempered with some lime and earth (for without lime the blood engendreth great store of worms) is most excellent to lay at the roots of Vines to hasten the ripening of the Grapes: *Quere*, if the same be not good for all other Trees and Plants to that end. I have also both heard and read of Pigeons-dung greatly commended for the forwarding of Fruit-Trees. *Quere*, the ashes of Bean-stalks or Vines, or of Salt alone, or Salt and earth first putrified together,
of

of Sope-ashes, and all those sundry sorts of Soyl more plentifully displayed in my Discourse upon the Vegetable Salt, if any of these being applied in due proportion, and in the true season of the year, will not afford some expedition in this work, and how often it shall be necessary to change and renew your soyl in one year, if you mean to have the first Fruit, and before all other. *Quære*, of Lime, and of such earth as Lime: is found in hollow Willow Trees, and of Fearn first putrified.

6. When the Grapes are knit, you must nip off the new Nipping off Grapes sprigs from time to time as they put forth, and thereby (as some think) your Grapes will

Rooting
of Seeds
within
doors be-
fore they
be sowed
abroad.

will both grow the greater,
and ripen the sooner.

7. Mr. Googe in his Book
of Husbandry commendeth
the mingling of stones with
earth, and so laid up together
in a vessel one year before
you plant them, and by this
means you may have store of
Sets very speedily to make
Hedges withal, by planting
them in an inner Garden, as he
termeth it : *Quare*, if Pease,
Beans, Pompeons, Musk-
Mellons, and all other Pulse
and Seeds which we would
have to come early, were
used in this manner for a
season in some small pots, or
other vessels, and filled with
rich mould, and watered with
the Liquors *ante Numb. 3.*
being first made blood-
warm,

warm, and the same pots and vessels also placed in a gentle Stove or some other convenient place aptly warmed with the fire, and after in *March* if it prove warm; or else in the beginning of *April*, if the same were sown, if so they would not be much forwarded.

8. And for the keeping of any Flowers or Plants abroad, as also of these seeds thus sown within doors; or any other pots of Flowers, or Dwarf-Trees in a temperate heat, with small charge, you may perform the same by hanging a cover of Tin or other metal over the vessel wherein you boil your Beef; or drive your Buck, which having a pipe in the top, and
C
being

A Stove
for all
Vegeta-
bles good
cheap.

being made in the fashion of a funnel, may be conveyed into what place of your Orchard or Garden you shall think meet; which room, if it were so made, as that at your pleasure it may become either close or open, you may keep it in the nature of a Stove in the night season, or in any other cold weather, and in the Summer time you may use the benefit of the Sunbeams, to comfort and cherish your Plants or Seeds. And this way, if I be not deceived, you may have both Orange, Lemons, Pomgranet-Trees, yea peradventure Coloquintida, and Pepper-Trees, and such like: The sides of this room, if you think good, may be plastered,
ed,

ed, and the top thereof may be covered with some streined Canvas to take away at your pleasure. *Quare*, if it be best to let the pipe of Lead to breath out at the end only, or else at divers small vents which may be made in that part of the pipe which passeth alongst the Stove. I fear that this is but a meer conceit, because the steam of water will not extend far; but if the cover to your pot be of mettell, and made so close that no air can breath out saving at the pipe, which is sodred or well closed in some part of the cover, then it seemeth probable, this cover may be put on after the pot is scummed.

9. Mr. Googe citeth an opi-
C 2 nion

20 *Experiments in Trees, Plants,*

Pease and
other
seeds
steeped in
severall li-
quors be-
fore the
sowing.

nion of some men that hold,
that Pease being laid in water
a day or two before they be
sown, will grow the sooner.

Quere, of Milk, Spirit of
wine, or water that hath been
long infused upon dung, or
wast Sope-ashes, or common
ashes, whose heart and salt
hath not been drawn out be-
fore; *Quere* also, whether
the waters aforesaid being
cold, or blood-warm do serve
best for this purpose; *Quere*,
of steeping them in Sack or
Malmsey, White-wine, *aqua*
composita, &c.

Parsley
to grow
speedily.

Com-
pound
earth.

10. I have been credibly
informed, that if you make
a lay of powdred Lime and
ashes, and then a lay of earth
and dung, and then a lay of
Lime, and upon that a lay of
good

good fat mould, and do there-
in sow your Parsely-seeds be-
ing first steeped in White-
wine, and then water them
presently, that so the heat of
the Lime and dung will force
up a wonderful and sudden
spring in a few hours: *Quere*,
if there be any good use of
this secret though it should
be true; *Quere* also of water-
ing the said seeds with *Aqua-*
vita, or Wine-Lees. *Fabam*
referunt novem diebus obru-
tam oleo, germinare in duabus
horis impositam pani calido,
Cardan. de rer. varietate, 878.

Wine, *A-*
qua-vita,
Wine-
lees, water
with.

Beans
steeped in
Oyl.

11. Some commend the
applying of Gun-powder to
the roots of Plants to for-
ward them; *Quere* of Salt-
peter, and *Quere* of the Salt
that the Petermen derive

Gunpow-
der, Salt-
peter, and
salt.

22 *Experiments in Trees Plants,*

Ashes.

from the Salt-peter; *Quare* of the ashes of every Plant bestowed upon it self.

Compound earth.

12. Take one part of Soot and one part Cow-dung, and two parts earth; plant the slips of your Carnations therein after they are well rooted. *Quare*, of Roses and other plants.

Cherries kept backward by a tent.

13. Sir *Francis Carew*, as I have heard, did spread a Tent over a Cherry-Tree that was well taken, and before they were grown to any great bigness, and thereby defended them from ripening; now and then also sprinkling water upon the Tent.

Salt and earth putrified together.

14. *Quare*, of putrifying of salt and earth together in some apt place, before you apply the same to the roots

roots of your Fruit-Trees, or Flowers, whether the same will not help your Plants forward?

15. *Quare*, of strowing Sope-ashes at several times upon Pease, or at the roots of other Fruits or Flowers before they be ripe, what effects will follow; and so of Salt, Lime, and all other kinds of enriching soil. These ashes are reported to kill Worms, Weeds and Rushes where they are bestrewed. *Quare*, of the use of Sea-coal ashes.

Sope-ashes used often to forward Pease; Fruit, &c.

Seacole ashes.

16. *Quare*, of arching of a small Orchard for Dwarf-Trees, and fire placed under the arches in cold weather; *Quare* also, of planting of great store of pieces of Glass upon

Arching the ground.

24 *Experiments in Trees, Plants,*

Glasses
upon the
ground.

Herbs &
flowers
kept by
covering
them as
they
grow.

upon the whole face of the ground to procure a stronger reflexion.

17. There were divers dainty fresh Sallar-herbs presented at *Christmas*, to Sir *Cutbert Bucks* Lord Maior of *London* by an *Italian*, which he had only covered in the earth as they grew. *Quare*, if it be not better to cover them over with sand than with earth, to defend them from putrefaction; *Quare*, how many sorts of Herbs and Flowers may be kept this way. *Plus Numb. 19.*

Back-
warding
of Fruits
& Flow-
ers sever-
al ways.

18. Cut Roses in the end of *April*; (*Quare*, if the bud only, or the buds and other shoots must be cut off) when they are full of young buds, and the branches will bud a-
gain

gain when all other Roses have done blowing; this I did see experimented in Oxford in July 1585. Cut Roses monthly one under another, and see what effects will follow. I have proved the cutting off of such Gilliflowers-stalks as began to spindle, and by that means they put forth their buds much later; *Quere*, in what other Fruits or Flowers this practice may be used; *Quare* also, if Flowers or other Dwarf-Trees may not be hindered from bearing their fruit early, by keeping such pots in shady places, or keeping them within doors for a time, until you would have them to come forward; *Quare*, of Beans and Pease cut down in

Beans &
Pease cut
down be-
times.

April

26 *Experiments in Trees, Plants,*

Fruit kept
backward

April or *May*; *Quare*, of twisting the branch of any Tree or Flower, and binding the same so twisted to a stick; *Quare*, of binding a band streight about the branch of any Tree or Flower, or winding of Packthread many folds about the same. And *Quare*, how long such Fruit or Flowers will hang upon their branches being thus used. Also when you have wreathed a branch of a Cherry-Tree, or Plum-Tree with your hand somewhat hard, then stay it there with two splents, & *vide quid fiet*. Also prove how little of the bark will serve a branch to convey the sap up to the fruit, and take away all the rest with a knife. Roses have been tried to come late
by

Late
Roses.

by binding the bark hard of the branches whereon they grow.

19. *Quere*, of covering over the Violets that come about *Michaelmas* with sand, *sicut ante Numb. 17.* and so of Strawberries that blow in cold weather; but this covering for Flowers, I think, would be done by whelming of apt earthen pots upon them, which pots may also be covered over with earth or sand if you see cause, for that otherwise you shall deface the Flowers. *Quere*, of Artichoke roots covered so all the Winter to make them more forward in the Spring, and so of the like profitable Plants; *Quere*, if it be not necessary to have earthen covers
or

Covering
of Violets
or Straw-
berries
with sand
or pots.

or caps to fit these pots, which you may take off at your pleasure in warm and rainy, or in Sunny weather, & after close them up and cover them again, as before. You may also cover each Dwarf-tree either growing in a pot or standing in the earth with a several cap made of wood according to the bigness or spreading of the banches, by which means you may either keep the fruit long upon the Tree, or after they are blossomed in the Spring time, defend them from the frosts in *May*, and so you shall have many times fruits when other men shall fail and want them.

Pots divided in
halves for
Flowers.

20. For the forwarding of all the seeds of Pompeons, Musk-Mellons, Cucumber-seeds,

seeds, Artichoke seeds, &c.
you may procure divers earthen pots of a reasonable bigness, and well glaz'd within to be made either of the fashion of Gilliflower pots, or round, upright and of an equal bigness, but let them be made either without bottoms in the fashion of a Steeple, or else parted into two equal halves, from the uppermost edge even to the centre of the bottom, in the midst of which bottom there may be a hole made of a convenient largeness; upon which (lest any worm should enter) lay a thin flat piece of lead full of small holes, through which the water may pass; let the sides of these pots meet so close as that thereby also no worm may enter to bite

Pots without bottoms and steeple-wise.

Prevention of worms.

Ordering
these pots

bite or gnaw the seeds ; these pots you may set abroad in warm and Sunny weather, or when there falleth any temperate rain ; and at all other times you may either keep them within doors, or place them in your warm Balneo, *ante num. 8.* and by this means, as I guess, you may have very early and forward Plants, from the which having artificially & workmanly taken the loose sides without loosening the earth from the roots, you may place the plants with the earth about them, in convenient holes made beforehand for that purpose ; or if you set these divided pots into the earth at the first planting of your seeds, then may you cover and uncover them

at

at your own pleasure, which other pots having holes in the tops of them, in the which you may place stone Funnel's, whereby to retain the rain that falleth in the night, being first ordered *sicut ante Num. 19.* is more fully handled; and when you think that the Plants have rooted deep enough, then you may dig about the sides of your pots, and so gently remove them, leaving the Plants fast growing behind in the earth. But if your purpose be to plant either Pepper-Trees, or Coloquintida-Trees, Orange or Lemon-Trees, Pomgranate-Trees or Almond-Trees, or such like, then you may likewise use pots of the same fashion, saving! only that they must

Pots for
Dwarf-
Trees.

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Tubs for
Dwarf-
Trees.

Bottoms
of oyled
paper.

must be made of a far greater receipt, because they are to yield a sufficient nourishment to a greater Plant, and that it will be requisite to have four large and strong ears to every pot; although I know that some do rather commend large deep and strong tubs, well pitched or cemented within and without, which may be transported upon great Coultaves or other carriages. And peradventure it shall not be amiss to have these divided pots without any earthen bottoms, instead whereof you may bind a strong & double oyled Paper, having a large hole therein, which may be fast tied about the skirts of your pot with Packthread, which Paper bottoms

bottoms may very well decay and rot during the time that each plant will require for his deep rooting; & if you doubt that the worm will be the rather busie with the Paper because of the oyl, then it shall not be amiss to make the oyl somewhat bitter by a decoction of Wormwood therein, & by this means you may easily draw your pot out of the earth, without loosening the earth at all that cleaveth to the roots of your Plants. I could also wish that each of the aforesaid pots should have some small holes in the lip of every pot, especially if they want ears, that thereby thin plated Lead might be fastned by smal wiers; in which leads, having your Prints for that

Holes in
the lips of
the pots.

D

pur-

Leads
with let-
ters hang-
ing at the
pots.

Watering
by a Lift.

Nourish-
ing wa-
ters.

purpose, you may strike two or three such Letters of the *ABC* as you shall think good, which letters you may always refer to some Paper-Book, wherein you may set down in particular the name of the Seed or Plant, the ordering, the season wherein you set them, and all other circumstances whatsoever, whereby you may learn either to iterate or avoid the like practice the next time. And it shall not be amiss in a time of drought or dry weather, as also in the first sowing or planting of your Simples, either to water them by a lift, as appeareth more fully *ante*, *Num. 4.* or else to place every pot in an earthen pan, half full of such water as hath been first infused in dung,

dung, Sope-ashes, &c. and exposed a few days to the Sun before you do use it in this manner; for by this means the earth will draw or suck up sufficient moisture at the holes in the bottom, whereby the root shall be kindly watered. Neither is it amiss, as I think, to have Shells or pans of earth, wherein to place all your artificial pots, which may receive such rain-water as soaketh through at the bottoms of your pots, which water because it containeth the strength or salt of the earth, would be after every great shower returned upon the pots again. But the first & principal care of all other must be to fill your pot with a fat and rich mold, whereof

Earthen
pans to
place
your pots
in.

Salt mold
for your
pots.

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Refresh-
ing with
new
mold.

Back-
warding
of your
Dwarf-
Trees or
Flowers.

there is good choice in this small Treatise, which being now and then refreshed with fresh earth at the top and sides by opening the pot, and paring away first of the old earth, and then filling them up again with new, may peradventure give great furtherance to your desires. And if you would have your Dwarf-trees growing in the afore said pots kept so backward as that they may bear their fruit after all other Fruit-Trees of the same kind, then you may in the beginning of the year give them only the morning Sun, or but one hours Sun in the morning, and another in the evening, or else you may place them in shady places, till you would have them to come forward;

forward; and hereby you may keep your Cherry-Trees as backward as you please; & so likewise if your desire be to avoid the dangerous frosts in *May*, then must you keep these pots, Trees and Flowers in some close room from the Sun, thereby to defend them from their early blooming, whereby those later frosts being spent before you expose them to the weather, the fruit shall be in no danger at the time of the knitting; and by this practice you may happen to have Cherries upon your Dwarf-Trees when the great Cherry-Orchard in *Kent* shall fail. And because every spectator on beholder of these conceited Trees may not pre-

Avoiding
of the
frosts in
May.

Hiding of
the art.

sently look into the invention hereof, it shall not be amiss to make either so many holes in the ground, or so many Brick receptacles as will receive your pots all the Summer time, wherein they may be so closely placed even with the ground, and all the brims of the pot so covered with earth, as that they shall seem to be growing ends in ordinary manner, to the great admiration of all such as shall behold them.

The fashion of
your
Stove
for the
Dwarf-
Trees.

20. Your Stove or close Orchard may be made to open at all sides saving the North, in the manner of the Shop-windows in *London*, whose Board and Timber must be well pitched, oyled or greased over with the fat of

of the Powder-beef-pot ; but then perhaps it will be offensive to your apparel, because it is over long in drying ; the roof also may be divided into four parts, and each part so placed as that it may be drawn up with a pulley, thereby to receive the Sun and rain when you shall think good ; and in cold weather, or in the Winter season to be kept warm, according to the manner set down *ante*, *Num.* 8. But how to build a house in such form as that the Sun both in the Summer and also in the Winter season may shine therein very plentifully, see the opinion of *Cardanus* cited in the *Collection of secrets*, made by *Wickerus*, p. 591. *Quere*, of a round Stove turning on a pin

D 4

like

40 *Experiments in Trees, Plants,*
like a Wind-Mill, and being
full of Glafs-windows.

Forward-
ing of
fruit by a
Tent.

21. A Tent spread over a
Cherry-Tree, or any other
Fruit-Tree, and receiving that
vaporious heat, *ante Num. 8.*
will help greatly to forward
the blossoming and ripening
of any fruit, being used in the
night time, and in all other
sharp and cold weather; all
the Art will be herein to have
some speedy means of pitch-
ing or spreading this Tent,
and taking the same down a-
gain.

Cutting
of Vines
to bear
quickly.

22. When you plant the
cuttings of Vines, choose such
of the last years shoots as
may have some part of the
former years stock cut off
with them, and so you shall
have Grapes a year sooner at
the least.

23.

23. *Quere*, if the taking away of the first blossoms of Fruits, will force any Fruit-Tree to bring forth new blossoms, and thereby to bear Fruit a great deal later; *post* 81.

Nipping
off the
first blossoms,

24. When you have first prickt in your seeds into the ground, set over each of them a glass which is broad below, and the bottom broken out, and whose neck is narrow, but leave the mouth open; these glasses defend off the cold air, encrease the heat of the Sun, and keep the Plants moist; because the water as it ascendeth by the attraction of the Sun, so it slippeth down again by the gliding sides of the glass; for I have seen in dry weather, the ground which hath

Glasses
on your
young
plants.

hath been covered with one of these glasse much blacker and moister then any other earth round about it ; this is done to defend a young plant from the nipping cold , and from the parching heat, until it have gotten up to some growth whereby it may defend it self the better, and then you may remove the glasse.

Soil for
out-land-
ish plants,

25. Let every Outlandish Plant be set in such soil as cometh nearest in kind to that soil wherein it did naturally grow beyond the Seas ; or if you can, bring over sufficient of the same earth wherein it grew.

To for-
ward Al-
mond
Trees.

26. Steep the Almonds with there shels in Milk two or three days , then make a trench

trench of good dung of two foot deep, upon which make a lay of fine sifted earth of a hand breadth deep, into which prick your Almonds, then cover them with more sifted earth, and every year remove them, always planting them in the same trenched ground, and so they will grow a yard in heighth every year, as Sir *Edward Denny* of *Ireland* assured me, upon his own trial; these because they are dainty and shady Trees, are fit to make stately Walks in Noblemens Gardens.

27. For the forwarding of your seeds of Oranges, Lemons, Almonds, Pomgrates, &c. use the same order as is here set down, for Musk-Mellon-seeds, and then remove

Orange,
Limon &
Almond
Trees for-
warded.

remove your plants into pots, which by apt covers you may sufficiently defend from all manner of cold weather, not exposing them to the air, but only in a Sunny day.

When to
sow that
which
you would
have to
seed;

28. Whatsoever you would have to run to seed apace, sow that seed either in three days before, or three days after the full of the Moon; *Quere*, if the three first days be not the better; and *Quere*, if the day of the full be not the best of all other.

High
borders
of Thyme
Hyssop,
&c. speedily.

29. If you board up earth to the height and breadth of a privy Hedg that is of six or seven years growth with boards that be thick and well seasoned, and bored through full of large and slope holes, or rather being full of long
flits;

flits; after the earth is well
 settled, you may plant the top
 of the border and sides like-
 wise with Hysop, Thyme, La-
 vender, &c. or else you may
 plant the sides with some con-
 trary Plant to make the one
 to set off the other the better;
 This way you may make dain-
 ty Borders of Carnations if
 you keep the sides cut in frets
 or other works, planting the
 Carnations on the top of the
 Borders; or if you please, you
 may cut out square holes like
 Checker-boards, or fair Ro-
 man Letters in Poses, or em-
 blems in the sides of the Bor-
 ders, and so keep them ac-
 cording to the works. By this
 devise you may also make
 Mounts, Pyramids, &c. ac-
 cording to the shape of the
 case

Sides of
 borders
 in works.

Checker-
 works,
 Poses and
 Emblems.

Mounts,
 Pyramids

wherein you plant ; and it will seem very strange being set of such plants as do ordinarily grow very low and near the ground. This way also a man may plant and artificial Tree or Arbor, planting the body and arms of the Tree with Herbs or Flowers; and to cover the secret, you may hide the arms and body with the bark of Trees or Moss ; as also Dogs, Lions, Bulls, Men, Fishes, Fowl, &c. having hollow moulds for the same, either of stone or wood well pitched within and without : There may be also pipes of lead conveyed through the bodies of such forms, which must be stopt at the ends, and have divers little holes in them, whereby water may be

An artificial Tree
or Arbor.

Dogs, Lyons,
Fowl,
Fish, &c.
artificial.

con-

conveyed with a Funnel into the pipe, unto every part of the earth.

30. If it be possible any way without fire or great charge, to have green Oaks, Elms, or other Trees at *Christmas*, then I hold this for one of the likeliest, To graff in the bud or otherwise any of the aforesaid Trees upon the Bay or Holly-tree which seem to have strong and hot sap by their greenness in winter time. If this prove, you may graff and imp in the bud all sorts of Fruit-Tree upon the aforesaid stock, whereby you may have most comfortable and dainty Walks in your Orchard or Garden. Mr. *Mas-*
kalls Book of the art of grafting, fol. 56. Some commend
the

Walks of
green
Trees in
winter.

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the planting of Fir-Trees in Walks, for this purpose.

Iron
backs to
your pots.

31. *Quere*, if it be not good in the Summer and Spring time to place concave backs of Iron or Tin plates in every pot wherein you have planted either Dwarf-trees or Flowers, and so to remove your pots from time to time as they may best receive the reflection of the Sun, whereby to ripen them the sooner ; use the like against your clusters of Grapes. *Quere*, if it be not good to plant Vines in moist grounds in respect of this secret.

A second
crop of
the same
Beans.

32. If you cut down Beans as soon as they have done bearing, and that the year prove a dripping year, you may have a second crop growing

ing from the same stalk that will come late; this I have proved in my Garden in *St. Martins-lane*. *Quare*, of Pease, otherwise you must water them presently upon the cutting down, and now and then after, as the weather shall give occasion.

33. I think of all waters Several waters. that are not infused, rain water to be the best of all other to water your delicate plants with; but if for want thereof you shall be forced to water them with common water, yet let the same stand in a great stone or wooden vessel three or four day s in the Sun, before you water therewith; but for the better forwarding of your Fruit and Flowers, you may prove brackish wa-
E ter,

ter, viz. such as cometh near
 in proportion of saltness to the
 Sea-water, which is one part
 salt to twenty parts of water,
 or much thereabouts; but this
 may not be used often for
 burning of your plants; or
 rather you may try water in-
 fused upon common ashes, or
 Sope-ashes, and all manner of
 dung, or wherein there hath
 been store of Hay, Litter or
 some other Herbs infused; you
 may also prove Wine, Milk,
 Wine-Lees, Strong-Beer, and
Aqua composta, if they be not
 too chafteable. *Quare*, of
 Sope-suds and Powder Beef-
 broth; *Quare*, if it be not
 better also to water your
 plants with the said water or
 Liquors being made first
 blood warm, *plus post 35.*

Quare,

Querc, of the strength or heart of much earth, extracted by common water, or rain-water, and then evaporated to a small quantity, wherewith you may water your plants to make them encrease exceedingly.

34. *Quare*, of grafting Cherry-Trees upon Apple-Trees or Pear-Trees, and so generally of all Flowers and Fruit that may be grafted, if being grafted upon such kind as be late and backward in bearing, if so the same will not bear their fruit much later.

Back-warding of Fruits & Flowers.

35, About three weeks or a month before their usual time of bearing, water your Roses morning and evening only with warm water, and by this means a *Cambridge*

Roses early.

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man had Roses yearly some twenty four days before others ; *Quere*, of this practice in all other Flowers, especially the water being first prepared *ut supra*, Num. 33.

Early
Cherries.

36. A *French-man* did greatly commend unto me the applying of Unsleak-Lime to the roots of Cherry-trees being first made bare in a convenient time of the year (*Quere*, if it be not better to sleek it first with water) and this for the forwarding of them in their bearing. *Quere*, if one part lime and one part earth, or one part lime and one part horse-dung. This practice destroyeth the Tree in a few years, but that loss is supplied with the advantage in the price of such early fruit. *Quere*,
re,

re, of Sope-ashes laid at their roots.

37. Lay Sheeps-dung in
soak in water for a convenient
time, and water your Arti-
chokes therewith, and it will
make them very great: So
likewise will the water where-
in dung hath been steeped
make Strawberries very large
and great; An antient Citi-
zen in *London* did use in the
Winter time to burn the earth
from the roots of his Arti-
chokes, and instead thereof to
lay in some of his waste Sope-
ashes, and he found the same
to forward them greatly.

Arti-
chokes &
Straw-
berries to
grow
great.

38. Slope your Stock up-
ward, and slope your Cions
downward, and joyn back to
back, bind them together as
Colliers do their whips, and

A speedy
Orchard.

E 3 close

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close the joynts with tempered Loam and Moss, or rather with wax, *ut postea.* 110. This is called the Whip-stock grafting, and you may in this manner graff a whole bow of a Tree to have an Orchard that shall bear fruit speedily.

Grapes
growing
late and
kept long

39. Put the bunches of Grapes after they are knit into great and apt glasses, having two mouths, holes or little pipes, the one just opposite to the other, *viz.* the one upward, the other downward, whereby both the water and the Sun may have issue: And when you fear the frosts you may stop up the ends close, and by this means you may happen to have Grapes growing upon the Vines at *Christmas*; or else
when

when the Grapes are ripe, if you cut off a long branch of the Vine which hath one, two, or three clusters of Grapes upon it, and at either end of the cutting, if you put a Pomwater, and every three days or six days change your Apples, tying a thread in the midst of the cutting, and so hang the same up in a cool and dry place, they will keep fresh a long time. Some thrust only the stalk whereon the bunch groweth in a sound and lasting Apple, and so hang it up; or else dig a hole in the earth, and lay good store of straw therein, and then Grapes, and then straw again, and over them lay boards, which must be so covered over with sand, as that

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no air may enter ; and by this means, as I am informed by a stranger, they will last a long time, *vid. post. 109.*

Good
Wines of
English
Grapes.

40. I think it not impertinent here to set down a means how we may of our *English* Grapes purchase an excellent good Wine ; and the rather, for that I find the same to be both probable and possible, both by some antiquities and experiences set down by Mr. *Barnaby Googe* in his Book of Husbandry, as also by that inevitable argument which he draweth from the same altitude of the Pole wherein we are, and under which there be found beyond the Seas most fruitful Vineyards, and which do yield both good and pleasant Wines,

Wines, as about *Backrack*,
Colin, *Andernach*, and divers o-
ther places in *Germany*, which
have (as he affirmeth in his
Epistle to the Reader) the
self same latitude and disposi-
tion of the Heavens that we
have, whereby is sufficient-
ly confuted that common,
though erroneous, received
opinion against our Climate,
that it should not be hot e-
nough for that Plant ; nay be
proveth further that the wide-
ness to the South is not altoge-
ther the cause of good Wines,
as appeareth in that you have
about *Orleans* great store of
good and excellent Wine,
whereas if you go to *Bruges*,
two days journey farther to
the South, you shall find a
Wine not worth the drink-
ing.

Experiments in Trees, Plants,
ing. The like is of *Paris* and
Barleduke (as *Mr. D. Dale* did
inform him) the one being
Southward, with naughty
Wines; and the other a great
way further to the North,
with as good Wines as may
be; and thus far *Mr. Googe*.
Mr. Holinshead also, in that his
painful and commendable Hi-
story of *England*, doth con-
stantly affirm, That this Island
hath been greatly replenished
with Vineyards, and that it is
not to be doubted but that if
the same Plants were by con-
tinuance of time, and good
ordering of them made fami-
liar with our soil, we should
have both full and rich Wines
of our own growing. And
here I have just cause to ac-
cuse the extreme negligence,
and

and blockish ignorance of our people, who do most unjustly lay their wrongful accusations upon the soil, whereas the greatest, if not the whole fault justly may be removed upon themselves. For whereas neither in Pasture nor arable grounds they look for any great or continual encrease without all the due and necessary circumstances of Husbandry be performed to the same; yet in Vines they only expect a plentiful Harvest (or else they condemn the soil) although they bestow no other manuring, proining or ordering of them, but only cut and proin them in the 12 days, & that very careless, and without any due regard or choice had of the branches which should

should be taken away close to the stock, and which should be cut off between the third and fourth joynt, and maintaining as well the waste and sucking roots, as the principal & master roots which ought most chiefly to be cherished & preserved. But because this matter requireth a large discourse, and for that Mr. *Barnaby Googe* hath very sufficiently handled this subject already, I will refer you to his labors, by which you may learn both the election of your soil, and the best situation thereof, the planting of your Sets, the proining both of the stock and roots, the turning and translation of the ground, the choice of the best and aptest dung for them, with all other necessary

ry

ry circumstances requisite to the Plant, unless peradventure there may be some few observations else to be learned, either at the hands of an experienced *French* Gardener, or that you shall think good to put in practice some one or other of these few conceited helps for the better forwarding of them in this our cold Climate; only I have thought it necessary for the avoiding of all *French* and *Spanish* objections, to set down a new, and yet a most assured and undoubted course how to furnish our selves with such store of good and perfect Wines, as that we shall not need either to be beholding to the *French-men* our doubtful friends, or to the *Spaniards*
our

62 *Experiments in Trees, Plants,*

our assured enemies, for this sweet and delicate kind of liquor; always provided that we use some careful means at the first to store our selves with the right and natural plants of those Vines, whose Wine we desire to have; for the bringing over of which plants from beyond the Seas, if we cannot otherwise furnish our selves of them within our own Continent, we may use that pretty ingenious help for the carrying of our Sets being well covered with earth, and conveyed into close vessels, as Mr. Googe in his afore-said Book hath in plain terms disclosed. Then supposing all the skilful experience of *France* to be first shewed and performed in our *English* Vine-

Vineyard, and that yet notwithstanding there wanteth a sufficient and perfect digestion to bring the Grape to his full ripeness and maturity, let us according to the *French* manner press out their sweet and pleasant juyce such as it is, and by sufficient decoction and ebullition bring the one moiety thereof to the fulness of a cutes, which being cold, we may well mix with equal proportions of the crude and raw Wine, or so proportion the same as it may be most pleasing to our own mouths, leaving them to the weather till they have inseperably united and incorporated themselves together; and this is no strange practice, but onely drawn from the *Spaniard* and the
the

the *Greek* who curreth both his *Malmseys* and *Muskadines*, and for the most part also his *Canary Sack* both to make them last the longer, and also to be more fuller of *Wine*. Neither are we here to be discouraged at the charge of fire, or the wasting of that faint flegmatique liquor that must of necessity be used in this work, for that (if every acre of ground will yield 700 gallons of *Wine*, as *Cato*, *Varro*, and *Columella* do testifie, or as the Vineyards of *Seneca* did yield with trade a Thousand Gallons upon every acre) I think we shall pay our selves with a higher interest then the Statute of 13 *Eliz.* will allow. Yet because I will not altogether per-

persevere in *Vestigiis patrum*,
I have thought good to set
down another course out of
mine own experience, where-
by (if we shall be forced to
use any outward helps in the
default of our Soil or Cli-
mate) we may yet by Art
supply that unto our selves,
which nature hath denied to
perform of her self : Then ha-
ving first expressed such Li-
quors as our *English* Vines be-
ing well ordered will afford;
let us to every gallon thereof
add one pound of the best Ra-
sins of the Sun, or *Malaga* Ra-
sins first wash'd in some change
of waters ; or if you will aim
at a Canary Sack, then chuse
the best of the *Xanthe* Currens
you can get, being well cured
and conditioned, & take a like

F

pro-

proportion of them to each gallon of your crude Wine ; leave them in this infusion or imbibition, until the Liquor have extracted both the tincture and strength of the Fruit ; then draw the Wine from the fruit, and when these two Liquors have in time wrought themselves into one body , they will become a most pleasant Wine, either resembling the Bastard, the Muscadine or Canary Sack, either to be drund alone , or serving to compas or tast any other Wine withal, according to the proportion of the fruit which you infuse, and according to the workmanship which you shall shew therein ; for herein I am assured that I have given light
suffi-

sufficient to an ingenious Artist, both to check and mate all those brewing Coopers and Vintners of our age, who rise early and work late in their gross and jumbling flights and apparelling about their Wines, when as it were much better both for the credit of their houses, and the health of their Customers, if they spent that time in their beds which they spend in their Cellars at midnight. But it shall suffice at this time, that I have broken the Ice into a harder passage, and that I have given a tast of some new skil, which I will be ready to enlarge and amplifie as well in this subject as in others of higher reach, when I shall see men of worth and special de-

68 *Experiments in Trees, Plants,*
fert to be distinguished from
the vulgar sort by their ho-
norable reward, till which
time I will leave Nature in a
sweet slumber; *Sed nunc ad*
oppositum.

Young
Onions
all the
year.

41. If you sow Onion-seeds
every month in the wane of
the Moon, and in cold wea-
ther, if you steep the seeds in
warm water, and sow them
in earth well dunged in pots,
and remove the pots into
close rooms in cold and un-
seasonable weather, you may
by this means have Onions
young and fresh growing all
the year, as a Gentleman of
Ireland did credibly inform
me of his own experience.
Quære, if young Radishes
may not be had in the same
manner.

Young
Radishes
all the
year.

42. If

42. If you cut a Red or Damask Rose root on *Midsummer-day*, between eleven and twelve of the clock before noon, at *Christmas* it will bear Roses. Note that you must defend them from cold weather by covering them all over with straw. *Quere*, if this secret may not be performed best in such Roses as grow in pots or tubs, because they may be best defended from all injury of frosts, by removing them into close places.

Roses
growing
at Christ-
mas.

43. Towards cold weather you must cover with some well tempered loam (as with horse-dung or flocks, but I take flocks to be the better) all the stalks of the Vine, even to the bunches of Grapes, cover-

Grapes
growing
late.

70 *Experiments in Trees Plants,*

ing the branches themselves with straw, and so you shall have your Grapes growing upon the Vine at *Christmas*. *Quare*, if this secret serve for any other Trees. Note also that your Vines must be opened three times in the year, and be dunged with some apt soil for them.

Rich
earth for
pots.

44. Take the earth that you shall find under an old Muck heap, but dig not too deep ; this alone is an excellent mold to plant your Gil-liflowers and other Flowers and Dwarf-trees in ; but if you mingle therewith both lime and dung also, and temper them well together, it will be a good means to forward such Flowers as you shall place therein, but you must

must not set your pots in the South Sun. *Quere*, of planting each Flower in its own putrification with earth, or in the putrification of Corn or any other Vegetable. See more at large hereof *porta* Pag. 100.

45. Some by cutting down of Artichokes presently after their bearing, gain also a second crop about *Michaelmas* or *Alhallon-tide*, if the weather prove not too sharp, because the Plant is tender; or else after they have done bearing you may cut them often, if you will lose your second crop of Artichokes, and content your self only with such stalks as will spring from time to time, and be very good meat being tenderly sodden.

A second
crop of
Arti-
chokes.

72 *Experiments in Trees, Plants,*

When to
sow seeds
in respect
of the
Moon.

46. All such seeds as you would have to run to seed again, must be sown in the three days before or after the full of the Moon, or at the full, and these will be forwarder then those which be sown three weeks before them in the wain of the Moon, as some Gardeners do hold.

Hinder-
ing of the
Colle-
flower in
blowing.

47. When your Cole-flower is almost ripe, cut it off, leaving a pretty long stalk at it, prick the stalk in the ground, and by this means the flower will be somewhat long before it blow, and so you may have then one under another, as you shall have cause to spend them,

Salt to
forward
Pease.

48. *Quere*, of sowing of two bushels of Salt amongst
four

four bushels of Beans or Pease what effects it will work either in forwarding them, or in the enriching of the soil, especially being oftentimes strewed; for I have been credibly informed that the like-proportion of Salt amongst Seed-Corn will multiply the encrease thereof exceedingly.

49. Plant many Dwarf-trees, and bow down their branches with their fruit upon them, including the fruit. And *Quere*, how long the fruit will keep; you must have party covers to your pots, and well luted.

To preserve fruit upon Dwarf-Trees

50. *Quere*, of steeping of seeds in water wherein some Sandiner is first dissolved *Quere*, if one sixteenth part be not

A fruitful-tying water for seeds.

74 *Experiments in Trees, Plants,*

Limon,
Orange,
Pomgra-
nate Tree.

a good proportion, for that cometh near unto the Salt-water, wherein there is some eighteen or twenty parts of Salt. *Quere*, also of watering all Outlandish Trees, as Lemon, Orange, Pomgranet, &c. therewith to forward them in their bearing. *Quere*, also of a strong Lee made of the waste Sope-ashes *plus ante Num.* 33.

Late
fruits.

51. Some do hold that if you nip off the blossoms in the midst with your nails when they do first bud forth, that new blossoms will afterwards break forth close by them, which will come later then the first. *Quere*, of the like practice upon those new blossoms likewise, *ante Num.* 23,

52. *Quare*, what will follow by the declination of the branches of Roses and other Flowers into pots either empty or half full of water, and standing within the ground.

A practice upon
Roses.

53. *Quare*, of throwing all the Sope-suds, and all the Powder-beef-broth at the roots of Cherry-trees, and other Trees, what effect will follow, and so of Flowers.

Sope-suds
and Powder-beef-
broth.

54. Lop no Tree in wet weather, neither cut down any Herbs in a rainy day, but in necessity. *Andrew Hill*.

When to
lop or
proin.

55. *Quare*, of steeping shavings of horn a long time in water, and after watering of Trees or Plants therewith.

Shavings
of horn,

56. *Quare*, of laying of store

Horn to
Cherry-
Trees.

store of horns at the roots of Cherry-trees, &c, if they will forward their bearing.

Pease forwarded with horn

57. What shavings of horn will do in forwarding a Pease Field, or in forwarding of Outlandish seeds; but especially sow early Pease, such as *Mr. Flower* soweth by *Bed-nal-green*.

Taylors shreds.

58. Taylors shreds laid upon the ground will enrich it greatly.

Horn in to a gelly to forward fruits.

59. If you steep shavings of horn in water and lime, the horn in time will grow to a gelly, then may you drein away the water, and apply the same to the roots of Trees or Herbs, without discovering of your secret. I have heard them much commended in forwarding of Rose-trees,

Rose-Trees forwarded.

60. The branches of all Trees must be cut off in setting time, except the Peach-tree, from which you must only take away the dry branches. *Ex veter. lib. manuscript. pergam Tho. Gas.*

When to
proin.
Trees

Peach
Tree.

61. When you plant any tender Tree, as the Apricot or such like, place it if you can against a pale or wall, and till cold weather be past, cover the same with a close cloth every night, rolling it up in the day time when the Sun shineth, or when the air is warm and temperate.

Young
plants co-
vered
with a
vail in the
night.

62. In the planting of every young Tree or Bush, pour in after it is set a gallon, two or three of water after it, to make it root the sooner.

Roots of
young
plants
well wa-
tered.

When to
gather
fruit.

63. Gather your Apples when the weather is dry, and also in the waining of the Moon, and that will preserve them greatly from rotting; *Quare*, if thar be not general in all fruit.

Cropping
of Trees.

64. When you cut off the head of any Tree, either to graff upon or for fuel, leave one branch near the top for the sap to run up upon, for fear the Tree perish.

Enriching
of corn-
ground
with salt.

65. If you scatter three bushels of Bay-Salt upon arable ground after harvest, you may sow four times Barley upon the same ground, and gain rich crops; *Quare*, of a fifth crop. *Probat. at Cheswick per Mr. Phil. Herb.*

66. The

66. *The whole manner of planting and ordering the Musk-Mellon, Cucumber, Pompeon, &c.*

Get a load or two of new horse-dung, wherein there is good store of Litter, and such as is not above seven or ten days old, or not exceeding fourteen, and which hath been laid still upon a heap, as it was taken out of the stable; did a pit that may be fit to receive the same, & ever as you lay any reasonable quantity thereof, tread it down as hard as you can; then sift about two inches thick of fine mold upon the dung, and prick in at every three or four inches a Musk-mellon-seed (which must

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80 *Experiments in Trees, Plants;*

must be first soaked twenty four hours together in Milk) stake this border of dung and earth round about very thick with sticks or forks that may appear above the ground some four inches in height, and upon these sticks lay hurdles or lathes or other awigs, so fastned together as that lying upon the sticks they may cover all the Plants over ; upon these Hurdles lay good store of straw, viz. so much as may be sufficient both to defend the cold from the seeds, and also to keep out a reasonable shower of rain if it happen to fall before the removing of your Plants. Let them so rest for twenty four hours, and then you shall see them peep above the ground , and
if

if the weather be open, and that the Sunshine, give them for seven or eight days after two hours Sun at the rising, & likewise at the setting thereof every day, by removing away the Hurdels with the straw upon them; then if the weather have been warm and that you see that every plant hath gotten three or four leaves, you may remove them, taking also sufficient of the earth and dung that grew about each plant with it, not loosening the root at all; then set these plants in holes made of purpose, so as they may stand about six inches within the earth, that thereby you may cover them and uncover them as before for five or six days; and if they hold out

G

so

so long, then are they past all danger, unless some storm of hail happen to beat upon them; but to avoid all danger, I think it not amiss for three or four weeks after they be removed, to keep them covered with empty pots as before, both night and day, saving that in fair days you may acquaint them by little and little, more and more with the Sun, in cold or gloomy days not uncovering them at all. Now when they have shot out all their joynts (which you shall perceive when you see a knot at the very end of the shoot, which is somewhat before the flowering time) then must you cover every knot or joynt with a Spade or Shovelful of earth, and thereby

by each knot will root, and put forth a new shoot, (*Quare*, of the same order in Cucumbers, Pompeons) by which means you shall have great encrease of Mellons, as perhaps twenty five or thirty rising from one Plant. But if in twenty four hours space your Plants do not peer above the ground, then you must water them in the heat of the day, and your water being pretty warm; and *Quare*, if some of those waters, *ante Num. 33.* be not good for this purpose; *Quare*, also of Salt or urine which are thought of some to be a very special good means to keep a dunghil a long time hot for the digestion of Chymical work. You must not forget to water

these young Plants often, at which time you may prove either common water, or first infused in some rich soil, and then warmed before you apply the same; *Quære*, of bestowing of Sope-ashes about their roots. When your Mellons are as big as little balls, then if you nip off the shoots that are beyond them, they will grow exceeding great; for then the sap doth not run any more to waste. Note also that this fruit desireth to be kept from moisture, and therefore you must use to cover them with broad leaves from the rain. Some be of opinion that all the art before set down for the speedy obtaining of Plants is needless, and that if you do
only

only let a few Musk-mellons shed their seeds as they grow, that so they will be much forwarder then by this device. *Sed Quare*, if it shall not then be very requisite to cover and defend them from all the injury of the Winter frosts, which the tenderness of that plant will otherwise very hardly bear or indure; *Quare*, of Ridge-tiles, or other Cylinders of Clay or Tin plates to set opposite against the Sun, & close by their roots, in such sort as they may receive the reflection of the Sun upon them to hasten their bearing, which you must remove in the afternoon, opposing them still towards the Sun, so as the Cylinders may at no time in the day shadow the roots;

86 *Experiments in Trees Plants,*

but then it will be also necessary to water them continually with dropping lifts, lest the excessive heat of the Sunbeams should make them to parch and wither. See all this more truly set down in my last Book of Gardening, *Fol. 8. Num. 18.*

Speedy
Arbors &
green in
Winter.

67. The Beech-tree groweth green continually, and therefore most apt to make pleasant Arbors for the Winter also. See *Googes Husbandry*, fol. 101.

Delicate
posts for
Carnations.

68. Beech-trees or Birch-trees make an Arbor speedily, and so likewise of the Jesammy, and of the Pompeon plants, but they grow not long green; *Quare, of French-beans.*

69. In this manner you may have most delicate Carnation

nation or Gilliflower pots; cause pots of eighteen or twenty inches heighth, and of a good breadth to be made in what fashion you will, with two ears East and West, and two pipes North and South, at the which you may water your Flowers; let the pipes be full of little holes at the entering into the pot, and let your pot be made full of holes at the sides, each hole distant one full inch from another, in the which you may plant Thyme, Hyfop, or small Lavender, and as it groweth keep the same even with cutting, or you may leave some part of the Herbs to grow longer then the rest, to make thereof Diamonds, Frets, &c. In these pots you may plant

G 4 Roses,

88 *Experiments in Trees Plants,*
Roses , Carnations, Lillies,
&c. or you may have your
pots made in the shape of
Flower-de-luces, round Balls,
Diamonds, &c.

70. *How to prevent the com-
mon error, whereby every
second year is made more un-
fruitful then otherwise it
would be of Apples, Pears,
Plums, &c, by the negli-
gence of man.*

Prefer-
ving the
Bud.

This is done by the careful
gathering of your Fruit ; for
almost every Apple, Pear,
Plum, &c. when it is ripe hath
a little pin or bud hard by it,
which the next year would
be an Apple, Pear, or Plum ;
and therefore in the gathering
of your Fruit, you must have
special

special care to pull them off so, as you hurt not the bud, which is easily done if you break off the Pear, Apple or Plum from the bud, and not toward it, whereby to hurt it.

71. How to keep Plums from cleaving, and so of Flowers.

This is done by the opinion of some by wreathing only of the bows or branches whereon they grow. *Quere*, if this or any such like means will help where Carnations or Gilliflowers do use to break the Cod.

72. How Flowers and other Dwarf-trees that root deep, may notwithstanding be forced

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90 *Experiments in Trees, Plants,
ced to grow in small pots or
wooden vessels.*

Quare, if this may not be done by planting them in pots that be divided in halves, in *ante Num. 20.* or such as be made steeplewise, whereby the earth and plant together may be uncased, and pared away at the sides and bottoms, and supplied with good and fresh mold, and by taking away all the superfluous ragged roots thereof, and cutting of the master root the shorter. For the only let, as I imagine, that should hinder great Plants from growing long in small vessels, is because the root cannot have room and deep enough to grow in; as also for that so small a
quantity

quantity of earth cannot give nourishment enough to so great a Plant without some yearly helps.

73. *A special order for planting and ordering of all Orchards, whereby your Trees shall flourish exceedingly, and bear store of Fruit.*

Some hold opinion, That if the ground be moist, then the shallower you set the Trees, the better they will prosper ; but if the ground be dry, then the deeper the better ; but I have heard it very confidently affirmed by a Gentleman of good judgment, and great experience in *re rustica*, That all Fruit-trees would be placed even in the summity of the earth, so as their roots may
only

92 *Experiments in Trees, Plants,*
only be well covered with
earth, by which practice he
hath seen a Tree that grew
deep before, removed and
planted in this manner, which
bare his full burthen of Fruit
in the first year of the trans-
planting thereof; and by this
means every ground that will
carry a good and rich sward
of grass, and being only two
foot or eighteen inches of
good earth, will serve to make
a most fruitfull Orchard,
whereby that erroneous con-
ceit (that it is impossible to
have a prosperous bearing Or-
chard where a vein of gravel
lieth within two foot of the
turff) is utterly confuted and
reproved, which would be a
very joyful and welcome se-
cret to a great number of our
English

Engliſh Gentlemen and others, who notwithstanding their great charge in laying in of infinite ſtore of earth upon their Backſides, can by no means procure a good Orchard to themſelves, and that only by reaſon of the deep ſetting of their Trees, which (how good ſoever the earth be) doth greatly hinder them and keep them back both in ſpreading and fruſtifying; the reaſon whereof is apparent to every young Novice in the Schools of Philoſophy. Now becauſe theſe ſhallow-rooted Trees will be in ſome danger to be overcome with the high and boiſterous winds, it is therefore neceſſary to ſet them about *Alhallon-tide* when the ground being moiſt
and

94 *Experiments in Trees, Plants,*
and supple, and the dripping
season of the year may fasten
and knit the earth unto them;
and for their better stay,
it will be requisite, that e-
very Tree have a sufficient
prop to support it; all such
grass or other weeds as grow
about these Trees must either
be weeded out or pared away,
that there may be no Plant at
all to draw any of that Vegeta-
tive Salt of the earth from the
roots of the Trees; this grass
may be laid in some fit place
till it be putrified, and then
returned again to his first
place. And because in hot
Summers and dry weather,
these Trees that shall root
thus near the superficies of the
ground will be apt to parch
and burn away, unless there
be

be some moistning means used to the same; I would therefore advise that there be some pretty store of Pease-straw or Fearn laid about the bottom of each Tree, which being now and then well moistened with water, if the season happen to be dry, will keep the roots wet enough, and defend them from the scorching heat of the Sun, or else you may wet them with a dropping list that may distill even through the straw or Fearn unto the root. *Quare*, if that Vines may be used in this manner. These Trees may be succored and relieved now and then with some fresh mold, whereof a smal quantity will serve, because the roots are so near to the uppermost crust

96 *Experiments in Trees, Plants,*
crust of the ground ; here I
think Sope-ashes would serve
to good purpose.

74. *The just time or ipsum
nunc, when it is best to graff,
both in respect of the Cions,
as also of the Stock.*

The Spring time of all o-
ther is the most proper and
apt time for graffing, because
then Nature being stirred up
by the strength of the climbing
Sun, doth force the sap to
ascend into the uppermost
part ; but because this season
of the year is subject to much
alteration, either by excessive
moisture, or too much droug,
and sometimes by the sharp
and nipping frosts, that often
do kill, and many times do
stay

stay and hinder the first putting forth of Vegetables. I have therefore thought it good for the better certainty of thy election and choice of times, to shew thee some undoubted way how thou mayst understand Nature herself speaking in this point by undoubted and demonstrative signs unto thee. And therefore when thou shalt perceive that she begineth to thrust forth those little red buds, which give the first hope of encrease unto thee; then, I say, and before those buds do break out either into a green colour, much less into leaves, thou must assure thy self that thy Cions is ready to be taken off, and grafted in such a stock, as hath also buds of the like

H colour

colour and bigness unto them, by which means they will so jump in a sympathy of Nature together, as that they will most lovingly and kindly embrace each other. And note, that the stock must always be as forward at the least as the Clons; for otherwise the stock will starve the Clons.

75. *The manner of implastering, Inoculating, or Graffing in the bud, with all necessary circumstances.*

In some smooth part of the stock whereupon you mean to graff, you must first slit the bark about half an inch overthwart the body or branch; then slit likewise the bark thereof downward from the midst

midst of the overthwart slit
somewhat more then an inch
in length, into which convey
your bud with the leaf at it,
so as, you place bark to bark
at the upper end, and cropping
of the uppermost part of the
leaf; then bind the bark of
the stock about the bud, with
such bands as are commonly
used in the binding up of
Brawn, and close up the joynt
with Loam and Moss well
tempered together; at three
weeks end you must take off
that band, because the bud
will swell, and then you must
bind the same again more
easily with a new band; but
some do hold it sufficient to
slit the band only in the back-
side, and so to leave it. Note
that in the gathering of your

bud you must be careful that you hurt not the bud in the inner side of the bark, when you divide the same from the branch whereon it grew ; for if you find any hole or pit therein, it is a manifest sign that you have left the bud behind ; for the avoiding of which danger, the best way of all other that ever I could find was, to slope the bark a little upward in taking off the bud, and to slit down at the sides and bottom thereof, so as it may be a pretty large square, and then putting in your finger gently at the upper end to draw the same downward, as you would slip off an Eels-skin; this bud you must place in a square hole cut out of purpose for the same,

same, and fitting bark to bark as near as you can in every place. Some in gathering of the leaf with the bud do make an overthwart slit a little above the leaf, which leaf would be such a one as hath a fair swelling bud by it; then they slit the bark on either side for the leaf, and so make the same to meet in the base point in form of an Eschocheon. Some do hold the best time of this grafting to be about the midst of *June*, or few days before or after; and some about the twelfth or fourteenth of *June*, but you shall find out the best time of all for this practice by the sappiness of the Tree when you slit the same, and by the smooth and easie divi-

viding of the bark from the Tree. If your bud take well, then must you cut off the stock or branch whereon you have thus grafted about the end of December a shastment about the bud, and when the bud hath afterwards given a sufficient shoot, then may you take off the branch or body whereon you grafted close at the bark of the bud, sloping the same upward with your knife: When you go about this work choose a fair, milde and temperate day, and shun all rainy and windy weather. Note also, that after you have taken off your buds, and untill you have fitted them in their stock or branch, you must lay them in a sawcer of fair water to keep them moist, and

and graff them as speedily as you may. Cut the bands in sunder in the backside about three weeks or a month after you have grafted; close it at the first with wax besides the bands; let the schocheon be rather a little too big then any thing too little, especially at the bottom for his place, because it will shrink, and be sure you close your schocheon well at the bottom; and so likewise in the grafting of a Cion. By this Art one small twig well chosen, and being full of buds will serve to graft sundry Trees, and it is not amiss to graft in divers places of the same Tree, if some should miss; for this grafting, though it take not, doth not any way impair or hurt the

H 4

Tree,

Tree. Graff Apple-tree-buds upon Apple-tree-stocks, and so of Pear-trees ; and Stone-fruit-buds; upon Stone-fruit-stocks. *Quare*, of grafting one Rose upon another, or upon any other Tree or branch. *Quare*, if the bud would not be grafted in a shoot of the same year. In Stone-fruit it is thought better to graft upon a shoot of three years old at the least; but in Pear-trees or Apples you may graft this way upon a shoot of one year. Prepare your stock first, and presently apply the bud ; for it is a rule in all grafting whatsoever, the sooner that you close them, the more ready they will be to knit together, even as a piece of flesh that is newly cut, being presently bound

bound up will heal more speedily, whilst the vital spiritus be yet warm.

76. *How to sow sufficiently in the wain or encrease of the Moon, notwithstanding the unseasonableness of the weather.*

It is a common received opinion at this day, that it is necessary to sow all seeds which you would have to run to seed again, in the encrease of the Moon, except Beans and Pease, which must be sowed in the wane of the Moon, the nearer the change the better; and so likewise to sow all such seeds as you would have to bring large roots, and not to run to seed in

Experiments in Trees, Plants,
in the wane of the Moon, as
Parfenips, Carrets, Radish,
and generally all Pot-herbs;
now if either the wane or en-
crease prove so wet and
showry, or so cold and frosty
that you cannot conveniently
sow your seeds in their due
season, then mingle well to-
gether each seed with a suffi-
cient quantity of fine and rich
mold, and leave them so to-
gether in pots, pans or dishes,
till you find apt weather to
sow them abroad; and so
you shall not be forced to lose
any season at all. *Quere*, if all
these pots or pans were set in
a stove or other warm place,
if so the seed would not be
much forwarder then if they
had been scattered abroad. Or
else you may sow them, the
earth

earth being moist, so as you provide sufficient store of dry mold or earth to cover the seeds.

77. How to have Garden-Pease or French-beans to grow without the help of sticks or poles

Set one row of Beans, and another of Pease some five or six inches asunder, and the Bean-stalks will outgrow the Pease, and be strong enough to support the Pease; your *French-beans* you may prick round about your Trees in your Orchard, suffering them to clime up by the bodies, and if need be you may bind them to the Trees with rushes or some such gentle band.

78. *How to destroy weeds, worms, rushes, &c. as also to enrich any pasture or arable ground, and perhaps to forward the Crop thereof.*

This is done first by plowing the ground twice, and then by sowing of the waste Sope-ashes in some reasonable quantity upon the ground after it is sown with grain in the winter time; two load or three load of them will serve an Acre of ground very richly : *Quare*, what effects will follow in the forwarding of Pease or any other grain or pulse, if the same be bestowed upon ground every two months ; If this fall out, then imagin how profitable it were

Pease and
beans for-
warded.

Weeding
of Woad
saved.

were for all such as sow any store of Woad; for by this means they may save an infinite charge in the weeding thereof, which now they cannot avoid; some think that Salt is of equal force with Sope-ashes in all these purposes; and that two bushels will suffice for an Acre of ground, being mingled with the grain in the sowing; and that thereby you may have yearly a rich crop of Wheat in a barren ground. *Quere*, if Broom or Fern may be destroyed by this means. I make no doubt of Broom if the ground were plowed and then the ashes strewed thereon; there is no doubt but that these ashes will also be very necessary for the enriching of Garden grounds.

Broom &
Fern de-
stroyed.

No. Experiments in Trees, Plants

279. How to stay the bleed-
ing of any Vine.

This is done by binding the
ordure of a man that is some-
what dry or stiff, in a Linnen
Cloth, close to the place
where it bleedeth, with some
Packthread, or other bands;
this I learned of an expert
Gardiner. *Quere* of the
dropping of melted Brimstone
upon the place, or wax and
Turpentine, Pitch, Rosin and
such like. Also if you sear it
with a hot Iron, and drop
Tallow thereon, and then
bind the bark hard with di-
vers folds of Cord or Pack-
thread about, this will stay
the bleeding thereof; experi-
enced per Mr. Hill.

80. How to have great and large Musk-mellons, Cucumbers, Pompeons, Gooseberries, &c.

When your Pompeons are as big as little Apples, then nip off all those young shoots that grow beyond them, by which means a Gentlewoman of her own experience did assure me, that she had Pompeons as big as a gross woman in the waste; the same may be done in Cucumbers, and Musk-mellons, as soon as they are grown to some little bigness. So likewise by nipping off the tops that grow beyond the Gooseberries presently after they are knit, she had exceeding great Gooseberries. *Quare*, of the like practice

Nipping
off the
young
shoots.

Pompe-
ons.

Goosber-
ries.

Apples,
Pears,
Cherries,
Grapes
to grow
great.

practice in Apples, Pears, Cherries, Plums, Peaches, Grapes, &c. *Quare*, also if there be any use of this secret in Flowers. Some commend the taking away of all the Runners except two or one from every Pompeon, whereby more sap may be conveyed into the Fruit.

Pompeon.

81. *How to destroy Fern or Broom.*

So soon as it is ready for the Sithe or Hook, cut it down, and continue this practice two or three years together, and in the end, the sap wanting issue will choak the root; according to that opinion it is likewise held in the destruction of a Tree, by
taking

taking away all the sprouts and buds from time to time, as they put forth at any of the branches. *Quare*, if this practice will not destroy Broom.

82. *How to make the leaves, stalks and roots of Artichokes to be good food for the Table.*

The roots of all young Artichokes, as I have heard some Travellers report, be in a manner as sweet and delicate as the Potatoc-root, and therefore to have store of them, I think it requisite to sow whole beds or borders of them; and if you will make use of the leaves, you must whilst they are young, *viz.* before they do carry any Apples,

ples, bind all the leaves in one mass together, and then bury them in the ground, and so they will become both sweet and tender; and this is a practice very useful in *Barbary*. Or if by cutting down the stalks you prevent the bearing of their fruit, you shall have their stalks full of strength and food, and to make pleasant Sallets withal, and that oftentimes in one year. Also if you cut them down presently after their bearing, you shall have young Artichokes towards *Michaelmas*, if time or season be any thing mild and temperate.

83. *How to make flowers double, as also to enlarge either fruits or flowers, and to make young Trees to prosper well.*

This is thought to be best performed by often removing the young Plant (and as some will have it, in the encrease of the Moon, or rather just at the full) and so likewise of Dwarf-trees. *Quere*, whether the removing of a stock before it be grafted, or after it be grafted, be the better way to make the Tree to prosper; and whether it be not good for the encrease thereof, to remove and transplant it often whilst it is young.

84. *How to defend a whole Orchard, or any particular Tree from the frosts of April or May, whereby the blossoms may knit without any danger.*

If you can happen upon a place defended, either by a hill, or some rows of high Trees already growing, from the North and East winds, then shall you not need to shew any other art, for that your Orchard having this defensive, is very likely to prove fruitful if there be no other impediment in the soil. But if you cannot be so happy to find a place so guarded to your hand, then plant on the
East

East and North side thereof a Quickset-hedg of Hathorne, which will grow to a reasonable height in a short time, without the which, you may also set a ranck or two of Elms, Ashes, or Sycamore, to break off the cold blasts from your Trees. But if by chance you have any wall already built, with two sides against the same wind, that will be a special good corner to set an Apricot-tree therein. Or if you are desirous to defend the blossoms of some few Trees from those cold winds, whereby to have store of fruit when others shall fail, then must you strain Canvas on the East and North side of them, until all cold weather be over-blown,

and so you may have Cherries, Peaches, Apricots and all other early fruit, when the rest of your Neighbors may happen to want: And this Canvas will be afterwards as serviceable for the Painter as any other, and so you shall reap great profit with no loss at all. But this practice fiteth an Orchard that consisteth of Dwarf-trees most excellently, as also a Garden of dainty Flowers that may be couched together under such an Artificial Wall. But if your Plum-trees do grow against a Wall, then may you hang a Sheet or piece of Canvas only over them every morning and evening.

85. *How to make the best choice
of any Cions whatsoever.*

Choose that twig which
you see to put forth as many
or more buds then the rest of
the Tree, and which seemeth
best to prosper in your eye.

86. *How to recover an old Bor-
der of Thyme or Hyssop that
is almost dead.*

You must cut the same
down very low at a conveni-
ent time, and if you can, after
some present rain or aganist
a shower, and then earth the
same presently, by sifting
earth all over the borders
with a long & flat Sieve, made
for that purpose, which being

Experiments in Trees, Plants,
in some measure answerable
to the breadth of your bor-
ders, will be much apter for
this purpose, then those round
Sieves that are usually im-
ployed in this work, whereby
much earth falleth into the
Alleys of your Garden.

87. *How to know the just time
when to remove or trans-
plant any Tree.*

When the leaves begin to
fade colour, and wax yellow
then is the fittest time of all
other to remove them, if
you would have them to
root well, and bear speedily.

88. *How*

88. *How a man may have a speedy bearing Orchard, but the Trees not beautiful, or to have fair and goodly Trees, that will not bear Fruit so soon.*

Prick in the kernels of Pippins, Pears or other Fruit in your Nursery (which Nursery would be always a worse ground then the Orchard wherein you must afterward remove them; for otherwise your Trees will not prosper so well when they are transplanted :) and after they be of three years growth, viz. about the bigness of your little finger, you may graff them either in the stock or in the bud ; these young grafted Trees being afterward

terward removed into your Orchard, consisting of a good fat mold, will bear fruit very speedily, but thereby they will be hindered from being fair and mighty Trees, like a woman that beginneth soon to teem, whereby her growth and spreading is much hindered; and this is an approved way to have a speedy Orchard. But if you desire to have an Orchard consisting of fair and beautiful Trees, but three or four years more backward in bearing, then plant your Orchard at the first with Crabstocks, and when they are able in any one year to put forth a shoot of two foot long at the least, then are they fit to be grafted, and not before; these stocks being thus grafted will

will spread into goodly, high and large Trees, but not bear so soon as your other Trees any store of fruit. And thus you may make your own election which manner of Orchard shall like you best.

89. How to make branches or arms of Trees to root.

If any Bough of a Tree do put forth a great number of warts or little knots in any place, saw off that Arm or Bough one inch below those warts, and prick it into the ground, and it will root and become a Tree.

90. How

90. *How divers Trees and Hedges are kept backward by the ignorance of him that planteth them only.*

When a Privy Hedg is laid too late, as in *February* or *March*, it will never come forward or prosper greatly; Yea, I have heard a man of good experience affirm, that if this year in *March* a Privy Hedg be laid, and another about *Alhallon-tide* the next year, that the later Hedg in seven years space, will gain three years growth or spreading of the first; the like is to be thought of all Trees.

91. *How*

91. *How to make the body of a Tree, or any young Cions to grow full of squares or Losanges.*

Slit a tender young stock, or a shoot of six years, when it is of some reasonable length, about one finger or six inches in length, and in the midst of the slit overthwartwise place a short stick that by thrusting out of the sides may make the form of a Losange, the inside whereof must be covered with Tar, & in time the bark will cover the same, and thus you may have a Tree full of Losanges, and one square made contrary to the other, whereby your work may seem the stranger.

92. *How to bring Fruit into any shape, or to grow within molds.*

This is done by clapping of patty molds having vents upon young Pears, Apples, &c. which have such forms and portraitures within as you like best; I think Leaden moulds, or moulds of burnt Clay to be the best and cheapest of all others. You may also put in young bunches of Grapes into little stone pots or glasses made of purpose, having vents in the top (for I think otherwise they will distil with the heat of the Sun.) *Quere*, of putting of water in the moulds, so as it touch not the fruit, to make the Grapes
to

to swell. *Quare*, if Leaden moulds be not the best of all other to ripen Grapes. *Quare*, also if these moulds being well luted towards Winter when the Fruit is ripe, if so the Fruit will not hang a long time upon the Tree notwithstanding all frosty weather.

93. *The best manner of binding or closing of any new grafted Cions.*

First let in the Cions of a good depth into the stock, so as if it take not in one place it may take in another, then bind the same about with such bands as they use to bind Brawn, and cover the band and slit all over with wax (green wax I have seen to take good

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good proof this way) for loam
will chop in dry weather, and
let in both wind and rain
which wax will not; and loam
by its hardness bindeth in the
sap too much, which wax
doth not hinder at all by rea-
son of its softness and pliant-
ness in warm weather, through
which, even the buds by help
of the Sun do easily break.

94. *To backward Flowers, as
Gilliflowers, Pincks, Straw-
berries, &c.*

Quære, if by covering them
over with some earthen pan
with wet straw or hay about
it, they will not be much hin-
dered; removing the pot but
one or two days in the week
to take the Sun, least they
wither away. 95.

95. Necessary Observations to
make either Outlandish or
English seeds to grow the
better.

If you can take the advantage of a hard frosty Winter; which hath mellowed the ground well, and made the earth to crumble; and then if it be also dry in *March*, that the mold may fall to fine powder in the digging thereof, and that your seeds be sowed and well covered before it rain (if the infertillity of the ground hinder not) you shall be in good possibility of a rich crop. I did sow some Staves-acre in a place whose mold was cast up in wet weather, and consisting of earth

K

and

and clay, it did so clod together, as that the seeds which were sowed the 26 of *March* did not appear above ground until the latter end of *May*, and then also they came very thinly. I had the like success in the same earth with *Artichok-seeds*, whereof the hundredth one came not up (although peradventure I might be abused in the seeds, which is an ordinary practice in these days, with all such as follow that way, either to deliver the seeds which they sell mingled with such as are old and withered, or else without any mingling at all to sell such as are stark naught) I would there were some fit punishment devised for these petty coseners, by whose means many

ny poor men in *England*, do oftentimes lose, not only the charge of their seed, but the whole use and benefit of their ground, after they have bestowed the best part of their wealth upon it. *Cheapside* is as full of these lying and forswearing Huswives as the *Shambles* and *Gracechurch-street* are of that shameless crew of Poulterers wives, who both daily, & most damnable, yea upon the Sabbath day it self, run headlong into wilful perjury, almost in every bargain which they make, selling Cocks for Capons when they have pared their combs, and broken off their spurs; old Hens for Pullets, when they have broken their pinions and breast-bones; Buntings for

K 2 Larks,

Larks, when young Dames go to market, bruised Rabbits for sound, being in their skins, and yet they will have their cases too except the bargain be the wiselier made; and stale Fowl for fresh & new, or at the least both sorts mingled together, maintaining their sales with such bold countenances, and cutting speeches, with such knavish practices, and such forlorn Consciences, as that they have both driven away many honest Marrons from their stalls, and so corrupted a number of young Maiden Servants with their bold and lewd lying, with their desperate swearing and forswearing, that they have made all plain and modest speech, yea all kind of Christianity

anity to seem base and rustical unto them. I would inveigh more bitterly against this sin, if my text would bear it; but now I will leave it unto the several Preachers of the Parishes where they dwel, who can present this matter more sharply, and with less offence then I may; I pray God, that either by them, or by the Magistrate, or by one means or other, this great dishonor of God and of Religion may be speedily removed amongst us. But to return to our first subject, I think it very necessary to sow as early as the coldness of the Spring will give you leave. I sowed Anniseeds and Fenigreek the 26 of *March*, 1594. and they prospered exceeding well, and yet I would have

sowed more early, but that the beginning of *March* was so showing, that I could not garden any sooner; these Anniseeds began to flower about the midst of *June*, at which time also the Fenigreek was full of cods. *Quare*, if the Staves-acre, Artichok-seeds, and Comin-seeds which I then sowed also, would not have proved better if they had been steeped for some reasonable time in water. I do find by experience that Anniseeds and Fenigreek delight in ground that is enriched with Sope-ashes; and Comin-seed, as I think, would either be steeped in salt water before it be sowed, or else some little store of salt would be mingled in the earth, for I found it to fail

fail me in divers other trials which I made without salt; and yet if I had not over-salted the ground, I think it would have proved much better.

Quare, of ground enriched with horn for Outlandish seeds, because I have been credibly informed that they will make Parsely-seeds to disclose themselves in three weeks. In *March 1595*. I sowed *English Worm-seed* (a seed much like if it be not the same, to that which is called *Semen Ameos*) in ground enriched with horn, and it grew very ranck, and full of blossoms.

96. *A necessary observation in the removing of young Plants of Musk-mellons, Pompeons, &c.*

The younger that you set

K 4

them

Experiments in Trees, Plants,
 them, being strong enough to
 be removed, I think they will
 prosper the better; for the sap
 will sooner rise, and be able
 to feed them.

97. *How to graff upon one root
 of Carnations all manner of
 Carnations, Gilliflowers,
 Pinks, &c.*

Pull off the top (some two
 or three inches in length) of
 every branch, and in their
 places put the like tops of
 flowers of contrary colours,
 thrusting them in as close as
 you can, and then bind them
 about with some thred, and
 they will bring forth the like
 flowers as those roots did
 bear from whence they were
 taken. This of Mr. *Jarret* the
 Chyrurgeon in *Holborn*.

98. *How to encrease the bearing of any Gilliflower or Carnation root exceedingly.*

Wreath every stalk a little in that place which you mean to cover with earth, then lay your earth thereon, and by this means every Slip will bring forth great store of Flowers. You may also dwarf them into little pots, being slit on the sides, and when they have taken sufficient root, you may cut them off from the old root, and so of every slip you shall have a bearing root the same year. This also of Mr. Jarret the Chyrurgeon.

99. *How*

99. *How to encrease the double or single Stock-Gilliflowers.*

Nip off the tops of them before they bud, at some reasonable length, and beat the stalk toward the bottom with the back of a knife, and then prick them into the ground, and close the earth well unto them. I have heard that the double Stock-gilliflower doth never yield any seed.

100. *How to dwarf any manner of Fruit-Tree, so as your Orchard shall bear Fruit the first year.*

In the beginning of January, or at the least before the same month be expired, chuse

a shoot of two years old, and if you can, such a one as hath some small sprigs about that part of the branch which shall rest in the midst of the pot, for they help greatly in the rooting; then cross-hack near those sprigs, about some two inches in length round about the bark with the edge of your knife, and then let it in at a slit, which of purpose must be made in the pot, wherein you mean to dwarf; fill the same full of earth, and if occasion serve, now and then you may water the same; hang this pot either by wiers firm to the body of the Tree, or else drive in a stake near the shoot and place your pot thereon, and let the same continue one whole year before you cut it
off

off from the old Tree. Note that the aptest pots for this purpose be such as hold Sugar loaves, having flits of an inch in bigness at one side thereof from the bottom to the very top, and having feet made unto them whereon they may stand (wherein they differ from the Sugar pots) and it will not be amiss if these pots consist of two parts, whereby you may take them from the earth, without breaking of the earth, when you would plant them in the ground; and so the same pots will serve often. These Dwarf-trees will bear fruit the first year. See *ante Num. 83.* how to defend such an Orchard in blooming time from frosts. Also if these Trees be set in rancks, the Walks

Walks being well gravelled, leaving only round rings of earth about the bodies of each, of six inches in breadth, where you may place some straw or fern if you fear the exceeding heat of Sol ; by this means the Sun will make a strong reflection upon the fruit to procure a speedy ripening. *Quære*, of adding the gelly of horn dissolved in Lime-water to the roots of them to make them more forward. *Quære*, of lapping of thin sheet-lead upon the bodies of your Trees to enforce the heat of the Sun upon them: You may choose such a plat for this purpose, as is either naturally or artificially defended from the North and East winds, by hills, walls, pails, or hedges, but

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but so as the Sun be not kept
also from them.

101. *How to multiply the double
Honeysuckle, Jesamy, &c.*

Lay a number of their stalks
or branches in the earth, and
each sprig will become a root
the next year, and so you may
store your self of any slender
plant, either to sell or give to
your friends, and by this
means you may make one root
to run at what length you
please in time, laying the
shoot into the earth, as it
groweth to any reasonable
length.

102. *How to have a Vineyard
to bear Grapes the first year.*

Let such shoots as are most
likely

likely to bear Grapes, run through the sides of pretty big baskets, opening the twigs to make passage for the branches, and filling the baskets full of earth in cutting time.

Quere, if there need to be any wreathing of the branch, or hacking of the bark as before, *Num. 100.* in the dwarfing of Trees to make them root the sooner; These baskets may afterwards be placed in any plat where you mean to make a Vineyard, and they will bear the first year; the reason is apparent. Note if your Vine whereon you dwarf do run upon a frame, then you may easily place the basket upon the frame; and if they run upon a wall, then may you hang the

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the basket by the ears to the wall. Some do use pots with holes bored through both the sides of them ; But I do hold the baskets the better way; because they will soon rot being put into the ground, whereby the earth needeth not to be loosened from the roots, neither will they take so strong a heat in the Summer time to parch them away before they be fully rooted, as the stone pot will do.

103. *How to graff in a dead
trunck, or stock of a Willow-
Tree.*

Put a Willow-stock, (*Quæ-
re*, if it must not be green
and fresh) into a furrow of
earth made for that purpose,
make

make clefts or slits in the same fit for such branches of the Mulberry-tree as you will graff therein; they must be made like wedges, joyning sap to sap, then close up the clefts and defend them from weather, and then put all the stock of the Willow under the furrow; this is borrowed out of *Cetsus*. And one skilful in planting told me that no Tree will perish that is planted in this manner. After the first and second year past thou mayst also saw or cut the trunck in sunder between the plants, and transplant them in places convenient. *Ex vetere lib. manuscrip. Th. Gasc.*

104. *To help a Tree whose stock or fruit beginneth to rot.*

When this happeneth, it is a sign that the bark of the Tree is sick, and therefore slit the same with a knife; and when the bad humor is sufficiently spent, dung the Tree well, and close the wood with tempered clay. *Ibid.*

105. *That the Peach-stone may have no kernel.*

Graff a Cions of a Peach-tree upon a Nut-tree. *Ibid.*

106. *To make a Peach-tree bring forth Pomgranates.*

Water the same with Goats-milk

milk three days together,
when it beginneth to flower.
Ibid. *Quis hoc credat nisi sit
prætestis vetustas?*

107. *To have great store of
Sage speedily.*

A Monk told me, that if
thou sow the seed of Sage
well ripe, as thou sowest o-
ther seeds in good earth that
it will multiply exceedingly.
Ibid.

108. *To have several Grapes
growing upon one branch, and
so of Roses, Gilliflowers, &c.*

Plant a White and a Red
Vine close together, and being
both rooted, set a branch of
either of them together in the
L 2 top.

top, sloping them upward unto the pith; joyn them sap to sap, bind them together, wrapping a supple Linnen-cloth about them, and at three days end, moisten them with water till it burgeon. *Quare*, if after a convenient time one of the roots may not be taken away, to make it seem the more strange. *Quare*, if this may not also be performed in other Fruit-trees, Roses, Gil-liflowers, &c. *Ibid.*

109. *How to have Trees of Thyme, Hysop, Lavender, Rosemary, &c.*

Quare, if by some one or other of the ways of grassing, the same may not be performed. *Rocella, ruta, & caules in arbores*

arbores mutantur ; teste Cardano in lib. de rer. variet. p. 225.

110. *How to keep Grapes upon the Vine till the Calends of January ; and so of other Fruits and Flowers ; as also to keep backward both Fruits and Flowers.*

Servantur in arbore, sacculo ex papiro nostra circumposito. Card. in lib. de variet. rer. 224.

Quare, if an oyled Paper will not perform this, especially if the Paper be oyled over often, as occasion serveth, and the thred also oyled with it. *Quare,* also if oyled Paper, especially two or three double, or more, will not keep any fruit backward by defending the Sun from it, but then it will

be necessary (as I think) to give some vent by pin-holes under neath, least the heat of the Sun do burn up the fruit, and work a distillation upon it; let the thred also be well oyled or waxed, wherewith you tye your Paper; If Linseed-oyl alone will not serve, mix some powdred Amber therewith in the boiling, according to that set down in my Book of Experiments; for this is an excellent secter, and to be applyed many ways if it be true, and it seemeth very probable. This is a delicate device to defend Gilliflower pots in Winter from the cold, and in Summer from the heat. *Quere*, if a Bladder will not serve instead of an oyled Paper. *Quere*, if taking away the
the

the bark almost round, or round, when the fruit is near-ripe.

III. *How to make Pears, apples, Plums, Grapes, &c. to dry as they grow.*

Before they be fully ripe, wreath the stalk of every fruit, by this means the fruit wanting nourishment will grow dry as it hangerh on the Trees. *Ex veter. lib. manuscrip. Th. Gasco. Quare,* of taking away the bark round about the branches that bear the fruit.

IIII. *How to destroy Caterpillers*

Make a ring of Tar towards the bottom of the Tree, then hang a bag full of Pismires by

Experiments in Trees, Plants,

a cord in the top of the Tree, so as they may easily get out, and the Ants when they cannot get down by reason of the Tar, rather then they will starve for hunger, will eat up all the Caterpillers, *per Lupton. 282.*

113. Secrets in Pompeons, Musk-mellons, Strawberries, and Artichoks, to make them prosper and grow great.

Temper fat mold with cream, and therein prick your Pompeon-seeds, the mold being in a pot or earthen pan; cover them in the night and in cold weather; and when it is warm, or during the Sun shine uncover them, and when they are sufficiently sprang up to make

make plants of, remove them into good ground, and they will grow to a monstrous greatness. *Probat. per Sir Tho. Challenor.* *Quare*, if the same practice will not serve in Musk-mellons, Beans, Pease, &c. The water wherein Sheeps dung hath been infused, will make Strawberries very great. And the Doze of Tanners well rotted in good earth will make rich ground to plant Artichoke plants in; and when you have set your young plants, if you strein a Canvas over them, uncovering them only in warm weather, and in the warmest part of the day, they will prosper exceedingly.

114. *To make Apricots to prosper well.*

Plant them against a wall that standeth into the East, and on either side of the Tree place a Fir-pole that is somewhat higher then the Tree, sloping-wise ; on the top of the poles place a course cloth, or rather a Sear-cloth, which in the day time, or in the warmth of the day may be rolled up, or in the night, or in cold weather let down to cover all the Tree, as it were with a Pent-house; and in this manner your Tree will prosper exceedingly; these cloths do also serve to keep off the frosts or cold winds when they are in blossom, until the fruit

fruit be knit, at which time you must only unfold your clothes in the warmth of the day, or when the Sun shineth, if the wind happen to be in any cold corner. A wooden pale may also serve instead of a brick-wall for the like purpose. This of *Andrew Hill*.

115. *To make Rosemary to prosper exceedingly.*

Take of the dirt of the High-ways, especially in the midst of them, where Cattel have dunged and stalled most, make a bed thereof, and therein plant your Rosemary, *Quare*, of all other plants & flowers. *Probat. per Mr. And. Hill* in Rosemary, which he could never have to prosper in his
London

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London Garden till he used
this Experiment.

116. *To make Trees to flourish*
wonderfully.

Water them now and then
with the Dregs of Beer or
Ale. *Per Mr. And. Hill. Quæ-*
re, of applying the same to
all Herbs and Flowers. *Quæ-*
re, of Salt-peter, or Sal Armo-
niack applied to the roots of
plants, being first well putri-
fied or rooted in earth.

117. *How to make a clay*
ground fruitful.

This is done by mixing of
a reasonable proportion of
sand with it, not that the
sand giveth any strength to
the ground, but that it open-
eth

eth the clay, which is oftentimes so binding, that the grain is starved therein before it can break out: specially in a dry season.

118. Certain Observations for the enriching of ground.

The River of *Trent* in *Lincolnshire* is suffered once in seven years to overflow a great Marsh, whereby it carrieth as much Swarth as can stand upon the ground: *Per Harsley* my Neighbor at *Bishops-hall*.

A Gentleman having his Stable near his Vine, had his Grapes exceeding great and pleasant, by reason of the stale of his Horses, that descended from his Stable to his Vine, and after turning his Stable into Lodgings

Water:
ing of
Grapes.

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Lodgings, the Vine began
to starve, and brought forth
poor and hungry Grapes, *per*
Andrew Hill.

A Western Gentleman by
direction of my Book of
Husbandry, steeped two years
together Barley for twelve
hours in the Sea-water, and
then sowed the same, *Anno*
1595. and 1596. and had a
very plentiful crop. *Quere,*
what soil. This of Mr. *An-*
drew Hill.

By my Cousin *Dancombe,* a
Neighbor of his steeped his
Wheat in stale four and
twenty hours, and sowed the
same in a ground consisting of
sand and loam, being very
barren, and had great yield,
Anno 1596.

The Gall of a Beast applied
to

to a young grafted Plant,
maketh the same to shoot for-
ward exceedingly ; *Quare*, of
Allom mixed with the gall ;
for one of these ways Mr.
Andrew Hill proved excel-
lent. Hereupon I gather, That
all offal of Beast, and all gar-
bage of Fish is very good.

F I N I S.
